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**Federal Aviation
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Helicopter Noise Definition Report
UH-60A, S-76, A-109, 206-L

Report No. FAA-EE-81-16

by
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December 1981
Final Reort

Office of Environment
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16. Abstract
This document presents noise data for the Sikorsky UH-60A Blackhawk, the Sikorsky S-76 Spirit, the Agusta A-109 and the Bell 206-L. The acoustical data are accompanied by phototheodolite tracking data, cockpit instrument panel photo data, and meteorological data acquired from radiosonde balloons. Acoustical metrics include both noise certification metrics (EPNL, PNLT, PNL) as well as community/airport noise assessment metrics (SEL, dBA). Noise data have been acquired systematically to identify variations in level with variations in helicopter airspeed and altitude. Data contained in this report provide essential information for development of helicopter noise exposure contours as well as further evaluation of ICAO helicopter noise certification standards. Accordingly, this information will be of interest to helicopter manufacturers, airport planning consultants, acoustical engineers and airport managers. This report serves as a noise definition document establishing baseline acoustical characteristics of the test helicopters.

17. Key Words
Effective Preceived Noise Level (EPNL) Sound Exposure Level (SEL), Helicopter Noise, Helicopter, S-76, UH-60A, A-109, Bell 206-L, Heliport, Airport Noise Exposure, Helicopter Noise Contour

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II

PREFACE

This report presents a large volume of acoustical and tracking data for three new technology helicopters, (UH-60A, S-76, and A-109) and a fourth current technology helicopter, the Bell 206-L. Much of the information provided in this document has been released previously in piecemeal fashion in the form of ICAO working papers, preliminary reports, SAE-A21 Committee working papers and information transmittals directly to the participating manufacturers. This document has been prepared in order to chronicle formally the information gathered during the tests. While some brief analyses are provided, a comprehensive integrated data analysis has been left as the topic of a separate report.

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- U.S. Army Blackhawk DR CPM-BH/ABRADCOM and Ft. Eustis Training Command provided the UH-60A Blackhawk
- Agusta, Costruzioni Aeronautiche, Italy, provided the A-109
- Sikorsky Aircraft Division, provided the S-76 Spirit
- FAA, Hanger 6 Operations provided the Bell 206-L
- FAA Technical Center

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C	Flight Path Tracking Plots and Position Data
D	Helicopter Cockpit Data
E	Meteorological Data - Temperature, Relative Humidity and Wind Data

LIST OF SYMBOLS AND ABBREVIATIONS

dBAm	Maximum A-weighted sound pressure level, expressed in decibels
SEL	Sound Exposure Level expressed in decibels, the integration of the dBA time history normalized to 1 second. This appears as NEL (Noise Exposure Level) in Appendices A and B. Values of NEL have been computed using the "10 dB-down" time history.
SPL	Sound Pressure Level expressed in decibels
EPNL	Effective Perceived Noise Level
PNLT	Tone Corrected Perceived Noise Level
PNL	Perceived Noise Level
OASPL	Overall Sound Pressure Level
DUR(A)	"10 dB-Down" Duration of dBA time history
DUR(P)	"10 dB-Down" Duration of PNLT time history
CPA	Closest point of approach. Subscripts typically refer to the reference or test flight paths (CPA_R and CPA_T)
dB	Decibels
Δ	Delta, or change in value
Delta ATM	Correction to PNLTM obtained by applying atmospheric absorption correction to the measured PNLTM spectra
Delta DIS	Correction to PNLTM obtained by applying spherical spreading losses to the measured PNLTM spectra
Delta 1	Correction term obtained by correcting SPL values for atmospheric absorption and flight track deviations per FAR 36, Amendment 9, Appendix A, Section A36.11, Paragraph d $\Delta 1 = \Delta ATM + \Delta DIS$
Delta 2	Correction term accounting for changes in event duration with deviations from the reference flight path
kts	Knots
NWS	National Weather Service
TSC	Department of Transportation, Transportation Systems Center
FAATC	Federal Aviation Administration Technical Center

EV	Event, test run number
ICAO	International Civil Aviation Organization
IRIG-B	Inter-Range Instrumentation Group B (established technical standard)
k(P)	The constant used to correct EPNL for distance duration effects in Delta 2(P)
k(A)	The constant used to correct SEL for distance duration effects in Delta 2(A)
RH	Relative humidity in percent
SL	Sideline
SL-N	Sideline-north microphone location
SL-S	Sideline-south microphone location
SPL	Sound pressure level
SR	Slant range distance, distance from the noise source to the receiver. Subscripts typically refer to the reference or test slant ranges (SR_R and SR_t or SR_1 and SR_2)
A	Approach operational mode
T/O	Takeoff operational mode
LFO	Level flyover operational mode
VASI	Visual approach slope indicator
V_H	Maximum speed in level flight with maximum continuous power
V_{NE}	Never-exceed speed
V_y	Speed for best rate of climb
V_T	Test velocity (airspeed)
V_R	Reference velocity (airspeed)

NOTE: Other terms used inthe Appendices are defined within the text or on the page where they are used.

1.0 Introduction

1.1 Overview - An extensive helicopter noise measurement program was conducted by the FAA during the summer of 1980. Since that time several analyses, reports and working papers have been published, each based on the test results. This document has been prepared to make available a full set of acoustical, tracking and meteorological data from which the reader can pursue a variety of useful analyses. The paragraphs below present an overview of the test series, the participants and the objectives.

Test Sponsor, Program Management and Data Analysis	Federal Aviation Administration (FAA) Office of Environment and Energy (AEE)
Test Facility	Federal Aviation Administration Technical Center (FAATC) formerly the National Aviation Facilities Experimental Center (NAFEC), located near Atlantic City, New Jersey
Flight Track Data Processing and Data Analysis	FAA-AEE Noise Abatement Division, Noise Technology Branch, (AEE-120)
Noise Data Measurement, Processing and Analysis	Transportation Systems Center (TSC) Noise Measurement and Assessment Facility
Radiosonde Data Acquisition and Processing	National Weather Services (NWS) Eastern Regional Office
Program Objectives	a. In support of helicopter noise prediction efforts; acquire noise data relatively free of ground plane interference effects through use of 10m and surface mounted microphones. b. In support of noise data correction capabilities; investigate the variation in noise level with variations in helicopter speed over the range 0.7 $(V_H$ or $V_{NE})$ to 0.9 $(V_H$ or $V_{NE})$ c. In support of noise data corrections capabilities; empirically determine the duration correction constant (K) for each test helicopter. d. In order to expand the FAA data base of helicopter noise information.

e. In support of noise data correction capabilities; investigate data variability associated with differences in propagation path, temperature and relative humidity.

f. In support of the Integrated Noise Model data base development; acquire position referenced, standard day normalized helicopter noise data.

Test Helicopters

a. Sikorsky, UH-60A, "Blackhawk", approximately 20,250 lbs gross weight, provided through the courtesy of the U.S. Army.

b. Sikorsky, S-76, "Spirit," 10,000 lbs gross weight, provided through the courtesy of Sikorsky.

c. Agusta, A-109, 5,000 lbs gross weight, provided through the courtesy of Agusta.

d. Bell 206-L, "Long Ranger", 4,000 lbs gross weight, FAA aircraft.

1.2 Measurement Locations - An array of nine microphones was used during the test. The microphones were distributed among six different measurement sites and at several heights above surrounding ground level, as follows:

Mic. 1, Centerline-Center, 4 ft. (CL-C)
Mic. 2, Centerline 492 ft. West of Mic. 1, 4 ft. (CL-W)
Mic. 3, Centerline 492 ft. East of Mic. 1, 4 ft. (CL-E)
Mic. 4, Sideline 539 ft. North of Mic. 1, 4 ft. (SL-W)
Mic. 5, Sideline 492 ft. South of Mic. 1, 4 ft. (SL-S)
Mic. 6, Sideline 931 ft. North of Mic. 1, 4 ft (SL-N)
Mic. 1G, Centerline Center (Ground) (CL-C)
Mic. 1H, Centerline Center, 33 ft. (CL-C)
Mic. 5G, Sideline 150m South of Mic. 1, (Ground) (SL-S)

A clear circle, approximately 200 feet (61 meters) in diameter, was mowed around each microphone location. Low scrub bush and grass bordered each cleared circle. The microphone locations are shown in Figure 1.2.1.

Figure 1.2.2 is a photograph showing the microphone array as seen from an approaching test aircraft.

FIGURE 1.2.1

MICROPHONE AND RECORDING SYSTEM DEPLOYMENT; JUNE 1980 HELICOPTER NOISE MEASUREMENT PROGRAM AT THE FAA TECHNICAL CENTER

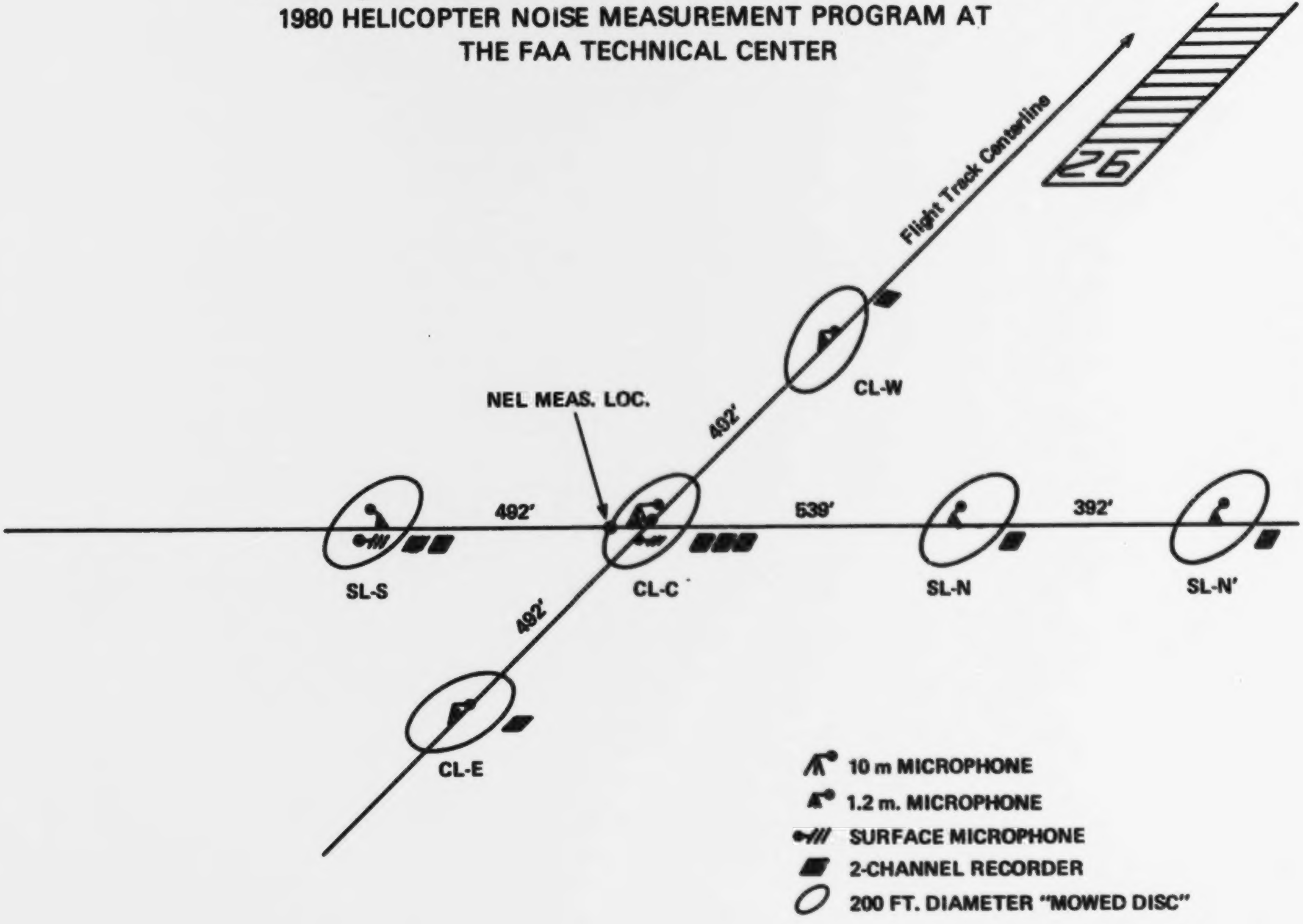
26
Flight Track Centerline
CL-W
NEL MEAS. LOC.
492'
492'
539'
392'
SL-S
CL-C
SL-N
SL-N'
492'
CL-E
10 m MICROPHONE
1.2 m. MICROPHONE
SURFACE MICROPHONE
2-CHANNEL RECORDER
200 FT. DIAMETER "MOWED DISC"

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Fig. 1.2.2
Looking Down Measurement Array

1.3 Orientation of Flight Paths/Flight Path Assistance - The reference ground track was parallel to and 75 feet (23 meters) to the left of the Runway 26 centerline. Level flyovers were conducted in both the 260° and the 080° directions. Approach operations were conducted from the east to the west on a heading of 260°. On the first day of testing (June 22) the takeoff operations were conducted from the east to the west. In order to increase the obstruction clear distance for level flight prior to takeoff rotation, all subsequent takeoffs were conducted from the west to the east.

Visual cues (squares of plywood painted bright yellow) were provided to define the rotation point for takeoffs and the break off point for both takeoffs and approaches. A standard red/white visual approach slope indicator (VASI) set at a 6° glide slope angle was used for the approach portion of the test. In addition, the rotorcraft flight profile and track were monitored in real-time by FAATC range control personnel who transmitted flight track correction information to the pilot, as required. In addition, the VASI ground crew monitored the approach events and advised pilots of any deviation greater than ±0.5 degrees from an approach angle of 6 degrees.

Three portable battery-powered (non-strobe) spotlights, similar to the sealed beam type used in emergency lighting systems, were also deployed at the visual cue and VASI sites to assist pilots in maintaining the array centerline during the early morning portion of the test.

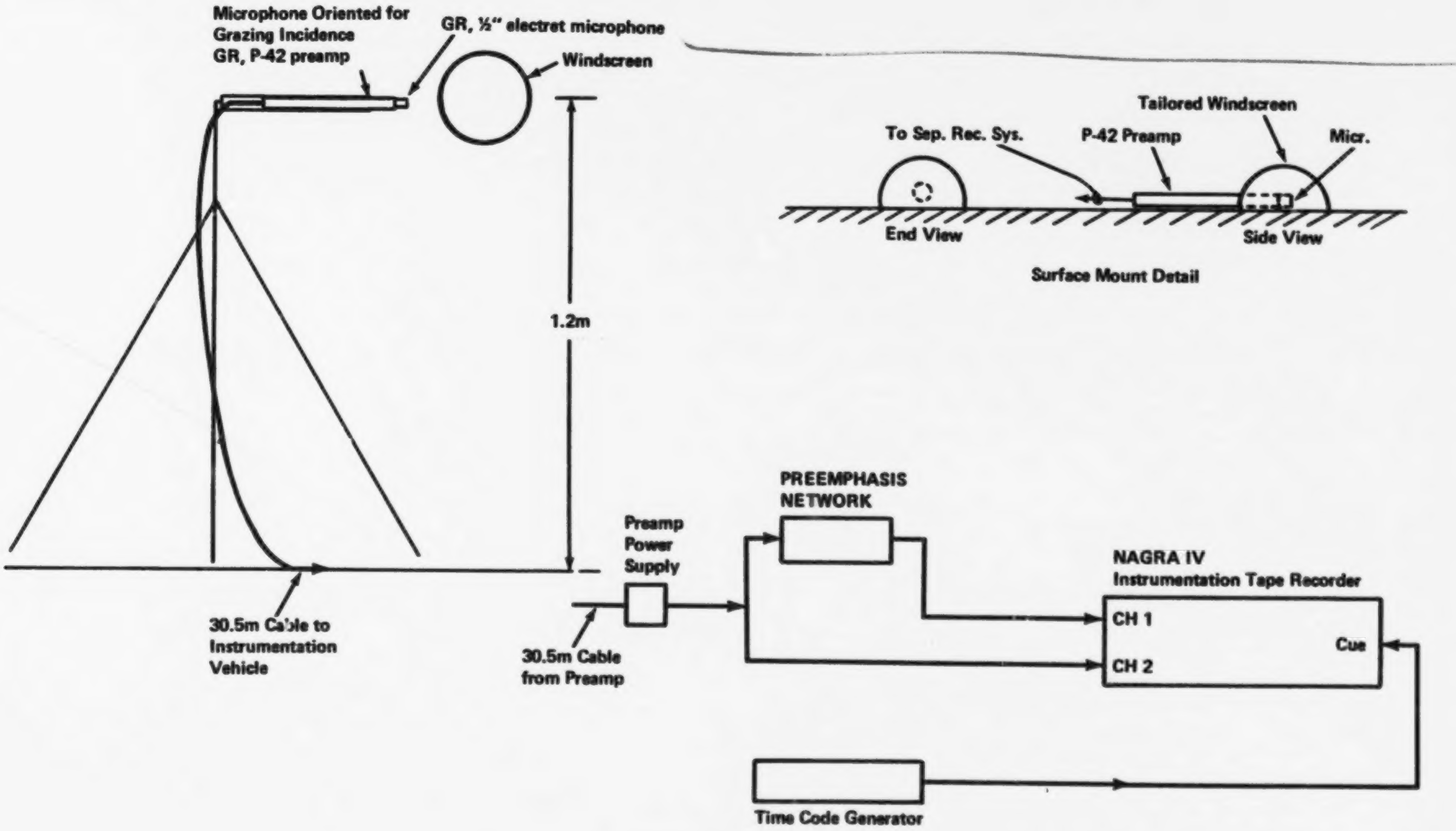
1.4 Acoustical Measurement Instrumentation - TSC personnel deployed Nagra two-channel direct-mode tape recorders operating with preemphasis on one channel. The preemphasis network rolled off those frequencies below 10,000 Hz at 20 dB per decade. The filtered signal was then amplified to achieve signal levels within the top 20 dB of the linear recording range. The use of preemphasis is necessary in order to boost the high frequency portion of the acoustical signal (such as a helicopter spectrum) characterized by large level differences (30 to 60 dB) between the high and low frequencies. Recording gains were adjusted so that the best possible signal-to-noise ratio would be achieved while allowing enough "head room" to comply with applicable distortion avoidance requirements.

IRIG-B time code synchronized with the tracking time base was recorded on the cue channel of each system. The typical measurement system consisted of a General Radio ½ inch electret microphone oriented for grazing incidence driving a General Radio P-42 preamp and mounted at a height of four feet (1.2 meters). A 100-foot (30.5 meters) cable was used between the tripod and the instrumentation vehicle located at the perimeter of the test circle. A schematic of the acoustical instrumentation is shown in Figure 1.4.1.

Figure 1.4.1 also shows the cutaway windscreen mounting for the ground microphone. This configuration places the lower edge of the microphone diaphram approximately one-half inch from the plywood (4 ft by 4 ft) surface. The ground microphone was located off center in order to avoid natural mode resonant vibration of the plywood square.

FIGURE 1.4.1

ACOUSTICAL MEASUREMENT INSTRUMENTATION


Microphone Oriented for Grazing Incidence
GR, P-42 preamp
GR, ½" electret microphone
Windscreen
1.2m
30.5m Cable to Instrumentation Vehicle
Tailored Windscreen
To Sep. Rec. Sys.
P-42 Preamp
Micr.
End View
Side View
Surface Mount Detail
Preamp Power Supply
30.5m Cable from Preamp
PREEMPHASIS NETWORK
NAGRA IV Instrumentation Tape Recorder
CH 1
CH 2
Cue
Time Code Generator

1.5 Tracking - The FAATC phototheodolite tracking system was used for aircraft position determination. The accuracy of the system is approximately ±2 feet for the distance encountered between the targets and the tracking towers. The phototheodolite operators were instructed to track the main rotor hub. Three dimensional coordinates were provided for each 0.1 second interval. A photograph of a typical phototheodolite tracking station is shown in Figure 1.5.1.

The final format of tracking data consists of X, Y, Z and time expressed in units of feet and seconds referenced to the tracking origin and provided in BCD format on 1/2-inch, 9-track magnetic tape recorded at a density of 800 BPI.

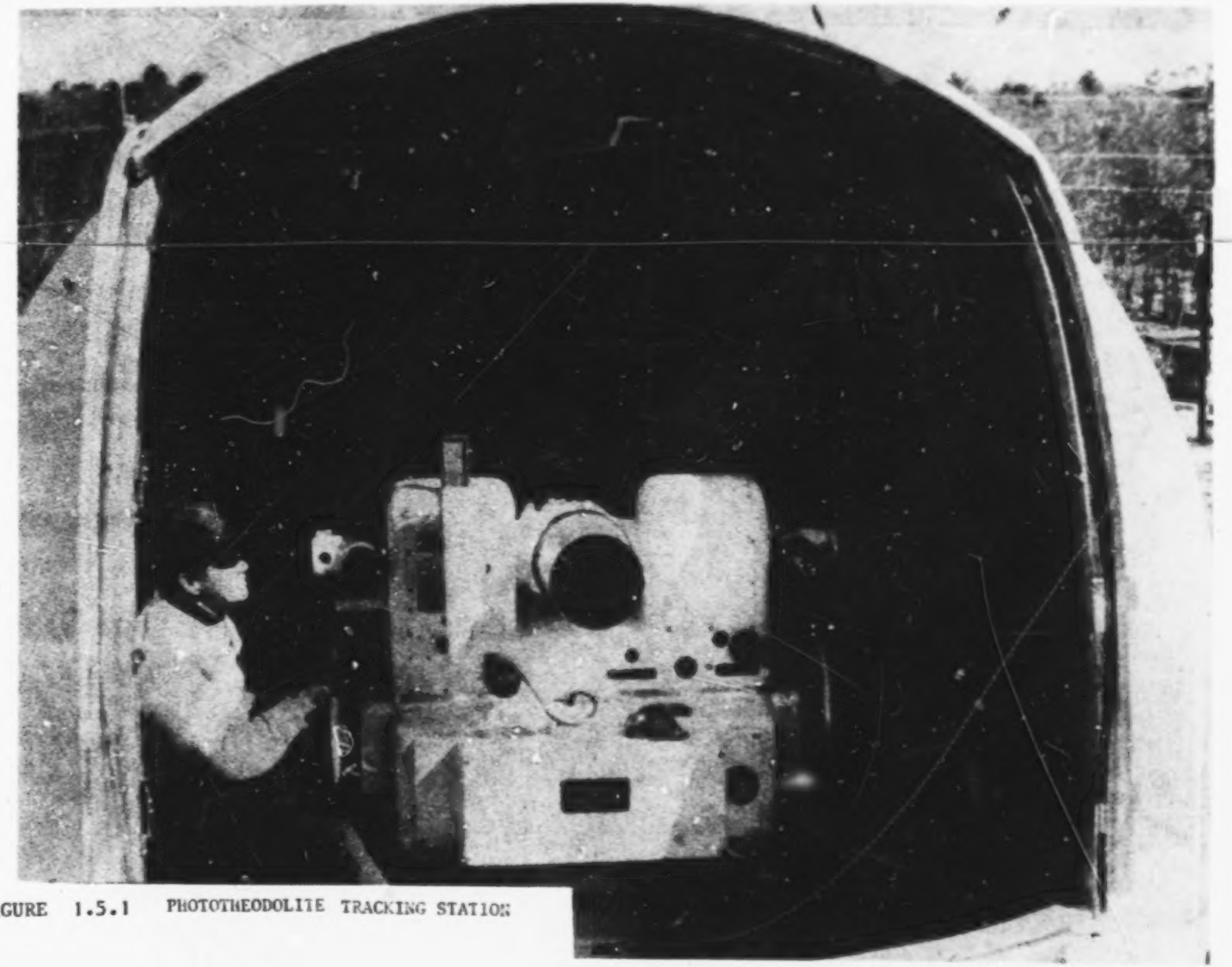


FIGURE 1.5.1 PHOTOTHEODOLITE TRACKING STATION

1.6 Meteorological Data - The National Weather Service (NWS) supported the test program by providing meteorological radiosonde data, consisting of dew point depression, temperature, and wind vector information from ground level through the highest test altitude. Using a standard conversion program the relative humidity has been computed for each value of temperature and dew point depression. An extensive summary of meteorological data is contained in Appendix E.

For the purpose of data corrections in Appendix B (atmospheric absorption corrections), the radiosonde data have been used to establish 10-meter correction values for temperature and relative humdity.

The National Weather Service specifications for the radiosondes used in the test are as follows:

Temperature: ±1 degree Celsius
Relative Humidity: ±5 percent
Windspeed: ±1 knot

These values encompass the full range of baseline calibration errors ±3 standard deviations. However, it is noted that bias errors in the base station or non-linearities in instrument response may introduce additional errors. The radiosonde hygristor and thermistor transducers also are subject to a certain response lag or time constant. The influence of these characteristics may also introduce some errors.

The radiosonde system is a good means to assess accurately temperature and wind vector information; however, it is recognized that the relative humidity is less reliable

1.7 Cockpit Data Acquisition - A 35mm color slide of the instrument panel was taken at the midpoint of each data run, approximately overhead the center centerline microphone position. A time-synchronized, sweep-second-hand clock was mounted on a convenient location on the instrument panel. Time correlated altitude, airspeed, rotor RPM, torque, vertical speed and heading were taken from each slide. These data have been provided to supplement phototheodolite tracking data and verify operational procedures. Typical cockpit instrument photographs are shown in figures 1.7.1 through 1.7.4.

1.8 Ambient Noise - Careful steps were taken to ensure as low an ambient noise condition as possible during the tests. Flight-line operations were curtailed during the tests, and all controlled air traffic operations were kept away from the airfield through cooperation of the Air Traffic Control Tower. Further a Notice to Airmen (NOTAM) was issued to effectively close the airport during the tests.

In addition, the local Air National Guard Fighter Interceptor Squadron curtailed its F-106 run-up operations during the test period.

Fig. 1.7.1
Sikorsky UH-60A Blackhawk Approach Event
B-16 on 6/22

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Fig. 1.7.2
Sikorsky S-76, Spirit Approach Event B-40
on 6/25

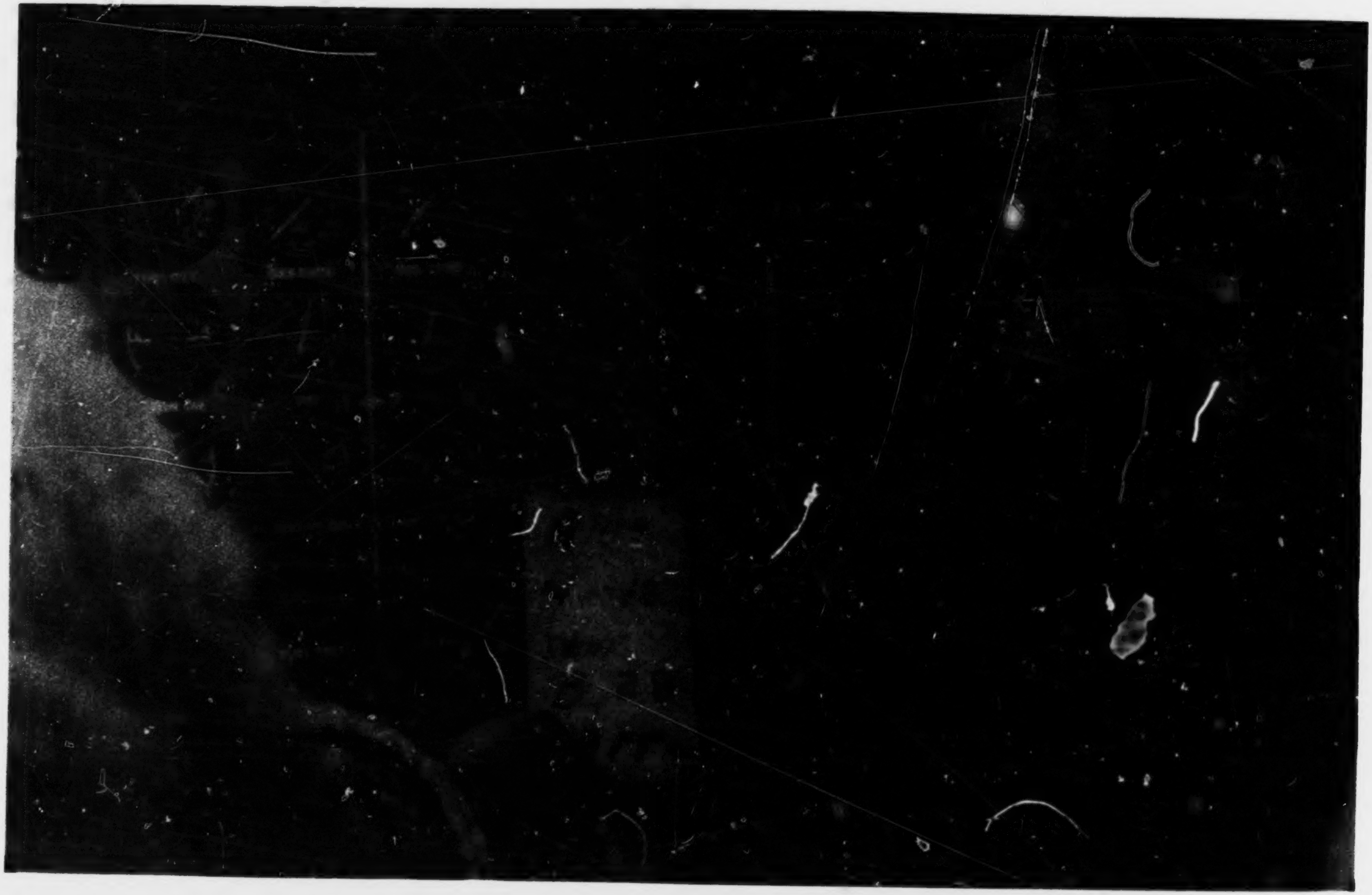

Fig. 1.7.3
Agusta A-109 Approach Event B-28 on 6/24

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Fig. 1.7.4
Bell 206-L 300 Ft. LFO, Event D1 on 6/26

2.0 Helicopter Operation and Description

2.1 **Helicopter Operational Procedures** - Prior to the test all participants were briefed on the various flight procedures to be used during the test. Strong emphasis was placed on careful adherence to prescribed reference test procedures, especially the anticipation of the takeoff rotation point and execution of accurate 6 degree approaches.

Participants were also encouraged to practice each test series, if possible.

An FAA observer in the cockpit of each helicopter assisted the pilot with test procedures

a. **Test Series Identification** - A handy cross reference useful in identifying each particular event with a given test series is the Appendix D "Helicopter Cockpit Data Tables." The slide run number on each photo is preceded by a letter prefix which identifies the test series and associated reference or target conditions.

Test Series A consisted of 1000-foot level flyovers with rotor speed at the maximum normal operating RPM airspeed stablized at either 90 percent V_H (maximum speed in level flight with maximum continuous power) or 90 percent V_{NE} (never exceed speed), whichever is less.

Test Series B consisted of alternating takeoffs and landings in accordance with the conditions specified in figures 2.1.2 and 2.2.2

Test Series C consisted of level flyovers at an altitude of 500 feet above ground level. In this test series the airspeed was varied to assess speed affects on noise level. Figure 2.1.3 provides a detailed procedure for the 0.9 V_H or 0.9 V_{NE} level flyovers.

Test Series D consisted of level flyovers at different altitudes at a constant airspeed of 0 9 V_H or 0.9 V_{NE} whichever is less. Figure 2.1.3 again specifies the proper operating conditions (except for altitude).

Test Series E repeated Series A to provide a means for assessing repeatability and changes in absorption characteristics between the start and finish of a test.

Test Series H consisted of hover events at a constant heading.

b. **Special Cases** - Notable deviations from the reference conditions specified above include all test scenarios for the S-76 on 6/23 in which the main rotor RPM was 100 percent rather than 107 percent which is the maximum normal operating RPM (top of the green).

The other significant variation was the UH-60A takeoff and approach test on June 26 in which alternative torque and speed parameters were used.

FIGURE 2.1.1

TAKE-OFF PROCEDURE

The take-off flight path shall be established as follows:

a) **the helicopter shall be established in level flight at the best rate of climb speed, V_y, ± 3 knots, of the maximum speed of the curve contignous to the ordinated of the limiting height-speed envelope + 3 knots (±3 knots), whichever is greater, and, at a height of 20 m (66 ft) above the ground until a point 500 m (1,640 ft) before the flight path reference point is reached;**

b) **upon reaching the point specified in a) above, the power shall be increased to maximum take-off power and a steady climb initiated and maintained over the noise measurement time period;**

c) **airspeed established in** a) above shall be maintained throughout the take-off reference procedure;

d) **the steady climb shall be made with the rotor speed stabilized at the maximum rpm for power-on operations**

e) **a constant take-off configuration selected by the applicant shall be maintained throughout the take-off reference procedure except that the landing gear may be retracted; and**

f) **the weight of the helicopter shall be the maximum take-off weight.**

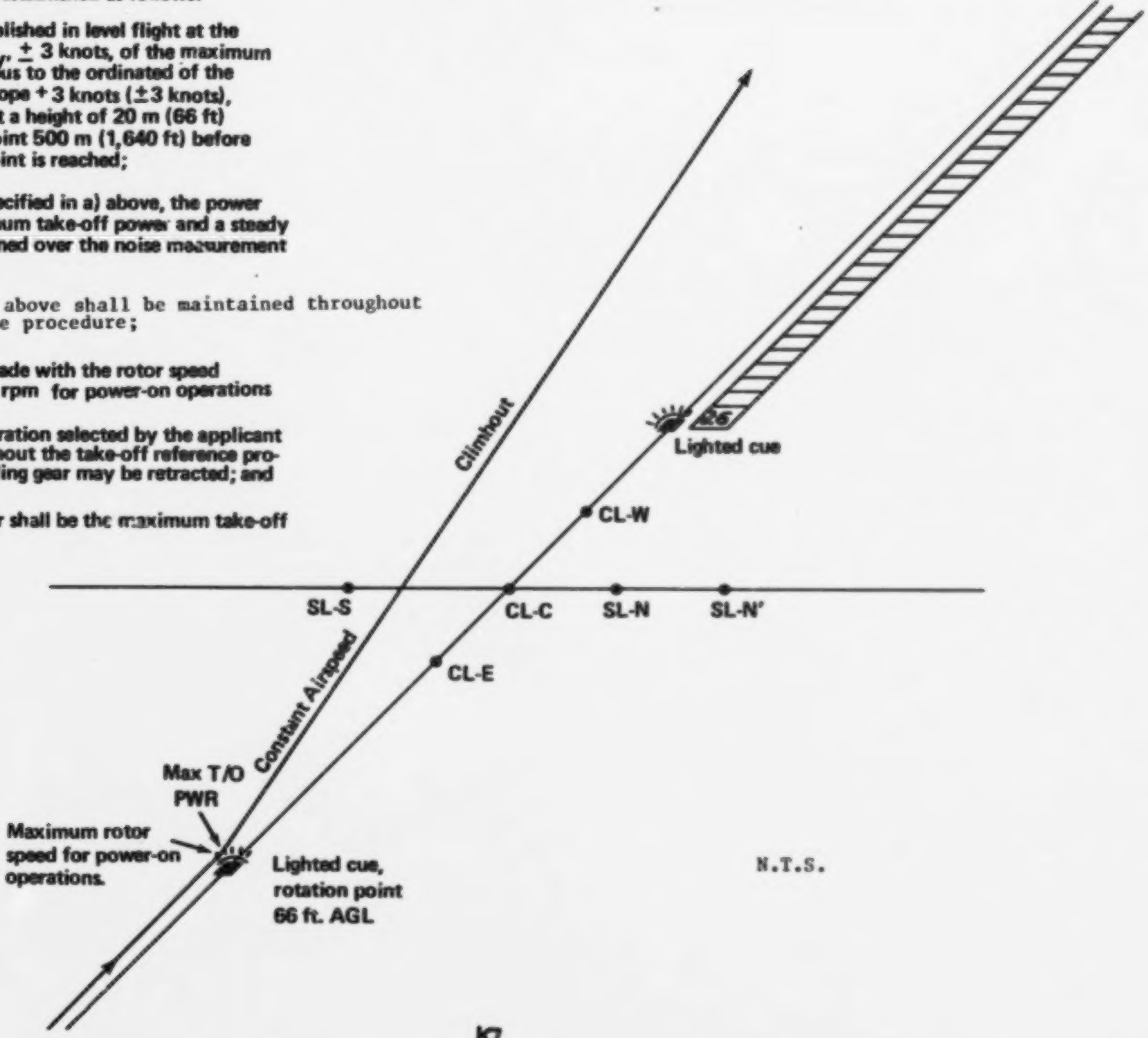

Climbout
26
Lighted cue
CL-W
SL-S
CL-C
SL-N
SL-N'
CL-E
Constant Airspeed
Max T/O PWR
Maximum rotor speed for power-on operations.
Lighted cue, rotation point 66 ft. AGL
N.T.S.

FIGURE 2.1.2

APPROACH PROCEDURE

The approach procedure shall be established as follows:

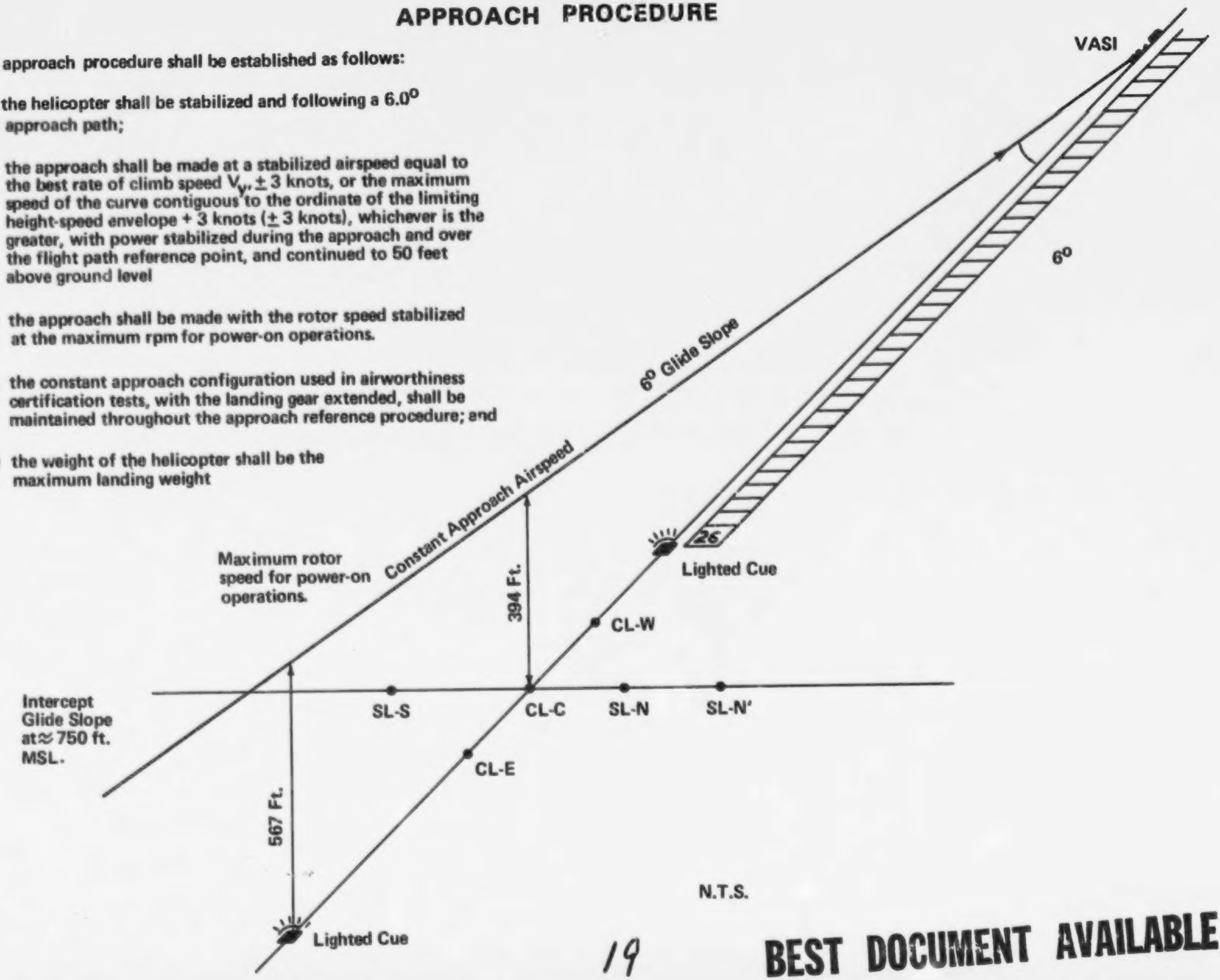
a) the helicopter shall be stabilized and following a 6.0° approach path;

b) the approach shall be made at a stabilized airspeed equal to the best rate of climb speed V_y, ± 3 knots, or the maximum speed of the curve contiguous to the ordinate of the limiting height-speed envelope + 3 knots (± 3 knots), whichever is the greater, with power stabilized during the approach and over the flight path reference point, and continued to 50 feet above ground level

c) the approach shall be made with the rotor speed stabilized at the maximum rpm for power-on operations.

d) the constant approach configuration used in airworthiness certification tests, with the landing gear extended, shall be maintained throughout the approach reference procedure; and

e) the weight of the helicopter shall be the maximum landing weight



VASI
6°
6° Glide Slope
Constant Approach Airspeed
Maximum rotor speed for power-on operations.
394 Ft.
26
Lighted Cue
CL-W
Intercept Glide Slope at ≈ 750 ft. MSL.
SL-S
CL-C
SL-N
SL-N'
CL-E
567 Ft.
N.T.S.
Lighted Cue

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FIGURE 2.1.3

LEVEL FLYOVER PROCEDURE

The flyover procedure shall be established as follows:

a) the helicopter shall be stabilized in level flight overhead the flight path reference point at a height of 150 m (492 ft);

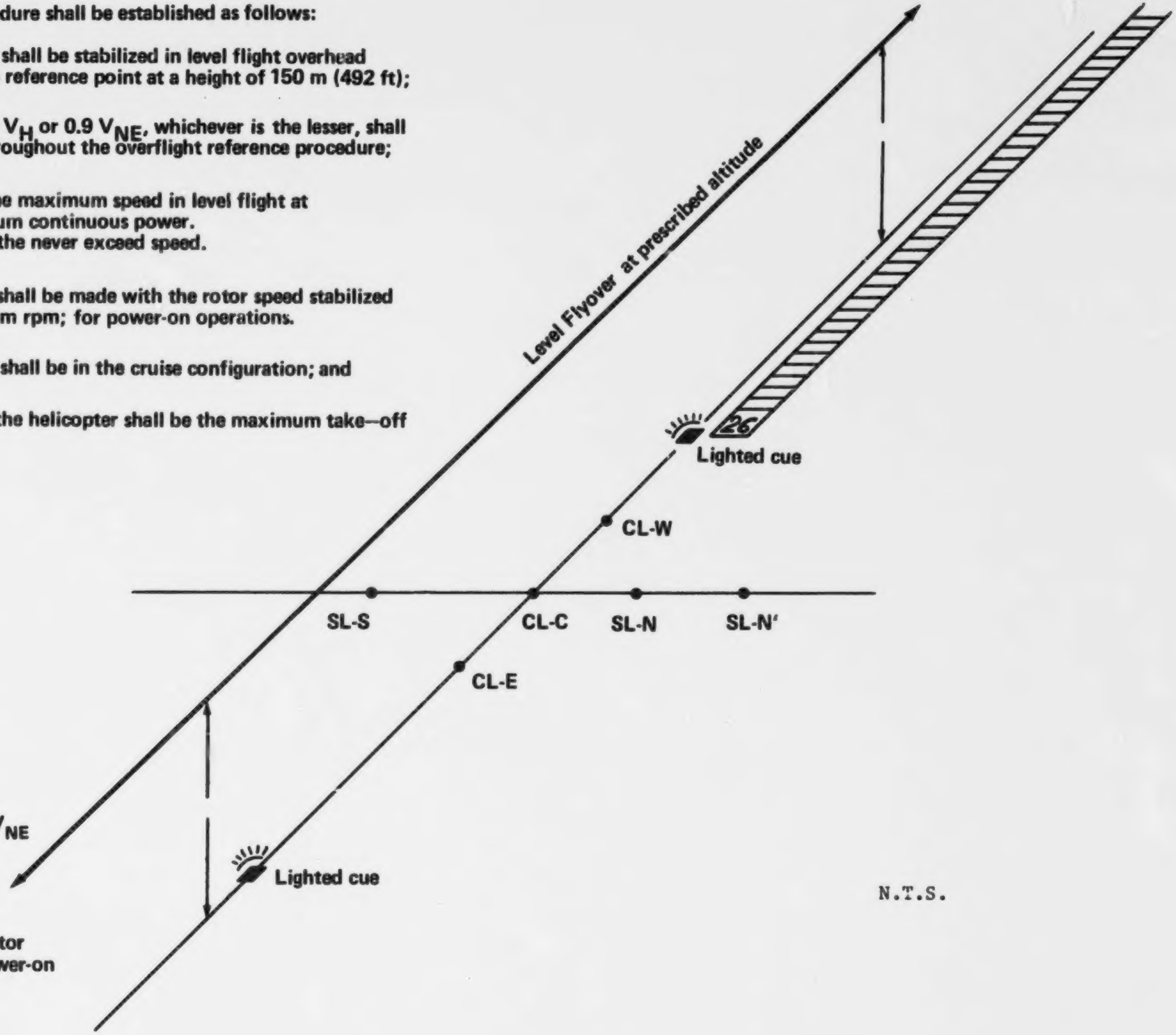
b) a speed of 0.9 V_H or 0.9 V_{NE}, whichever is the lesser, shall be maintained throughout the overflight reference procedure;

NOTE: V_H is the maximum speed in level flight at maximum continuous power.
V_{NE} is the never exceed speed.

c) the overflight shall be made with the rotor speed stabilized at the maximum rpm; for power-on operations.

d) the helicopter shall be in the cruise configuration; and

e) the weight of the helicopter shall be the maximum take-off weight.


Level Flyover at prescribed altitude
26
Lighted cue
CL-W
SL-S
CL-C
SL-N
SL-N'
CL-E
Lessor of .9 V_H or .9 V_{NE} maintained throughout flyover
Maximum rotor speed for power-on operations.
Lighted cue

N.T.S.

2.2 Reference Flight Paths - Appendix B of this report contains acoustical data corrected for actual flight path divergence from selected reference flight paths (as well as corrections for non-standard atmospheric absorption and duration effects).

In the case of level flyover events, the reference altitude is the specified target altitude.

For approaches, the reference path is a 6 degree glide slope along the microph array centerline with a ground plane intercept at a point 3,754 feet (1144 met from the centerline-center microphone (CL-C). This path yields a CPA of 394 f at the CL-C location.

The takeoff reference flight paths have been determined from information provided by the helicopter manufacturers or from pilot operating handbooks. It is noted that different representatives of same helicopter manufacturer may provide slightly different reference parameters for V_y and best rate of climb for a given weight, temperature and pressure. This observation is made to point out that although the climb angles given in Table 2.2.1 are certainly representative, it is reasonable to examine or entertain alternative climbout profiles associated with other performance assumptions.

The necessary empirical data and test information has been provided to allow the reader to adjust Appendix A data to other "reference" profiles. It is noted that all of the corrections applied in Appendix B relate to acoustical propogation and assume that the "reference position" could be realized without changing the helicopter acoustical radiation characteristics.

Table 2.2.1

Takeoff Reference Climbout Paths for 77°F, Sea Level Standard Day Pressure

Helicopter	Test Date	Rate of Climb (Feet Per Min)	Airspeed (Knots	Climb Angle (Degrees)	Gross Weight (Lbs.)	Main Rotor Speed
UH60A	June 22 (N.2)	1950	80	13.9	20,250	258 RPM, 100%
UH60A	June 26 (N.1)	1950	80	13.9	20,250	258 RPM, 100%
A109	June 24	1450	60	13.7	5,730	385 RPM, 100%
S76(100%)	June 23	1350	74	10.3	10.000	293 RPM, 100%
S76 (107%)	June 25	1240	74	9.5	10,000	314 RPM, Top of Green, 107%

NOTES:

N.1 Takeoff torque reduced to Hover+10% from 100%, thus rate of climb and climb angle reference values are not strictly applicable. The Appendix A, "As Measured" data are of most interest in this case especially in comparison with the 100% torque takeoffs.

N.2 The pilots selected Vy=69 knots for the test day temperature (54°F) rather than 80 knots. The rate of climb as shown in Appendix D was on the order of 2200 fpm.

2.3 Helicopter Characteristics - Pertinent noise related helicopter characteristics are tabulated in Table 2.3.1. This format has been used in previous ICAO Working Group B (helicopter) noise data reports. The engine, main rotor, and tail rotor, as well as general performance characteristics, have been noted, recognizing their influence on the generation of external noise. Photographs of each test helicopter are shown in Figures 2.3.1 through 2.3.4.

Table 2.3.1
HELICOPTER PHYSICAL/OPERATIONAL PARAMETERS

MANUFACTURER	SIKORSKY	BELL	AGUSTA	SIKORSKY
COUNTRY	U.S.A.	U.S.A.	ITALY	U.S.A.
MODEL	S-76	206L	A-109	Sikorsky S-70, Military Disignation UH60A Blackhawk
NUMBER OF ENGINES	2 Allison 250-C30	1 Allison 250-C28B	2 Allison 250-C20B	2 GE-T700-GE-700
MAX TAKEOFF WEIGHT	4545.9 kg 10,000 lbs	1814 kg 4000 lbs	2599.0 kg 5730 lbs	9185.2 kg 20,250 lbs
SHAFT HORSEPOWER (SHP)	-RATED 650 shp ea -T-O, 610 shp ea -MAX CONT, 600 shp ea -NORM CRUISE, 450 shp ea	- MAX CONT. = 489 shp	-T/O, 420 shp ea -MAX CONT = 385 shp ea	-RATED 1543 shp ea. -MAX CONT = 1327 shp ea.
SPECIFIC FUEL CONSUMPTION MAX POWER lb/hp/hr	0.63	0.63	0.65	
"MAX CONTINUOUS SPEED"	LEVEL FLIGHT w/MAX CONT POWER 146 kts.	MAX LEVEL SPEED AT S/L 130 kts.	MAX SPEED IN LEVEL FLIGHT w/ MAX CONT PWR 142 kts *	MAX SPEED IN LEVEL FLIGHT w/ MAX CONT PWR 165 kts.
NEVER EXCEED SPEED (Knots)	155 kts.	130 kts	158 kts	195 kts.
MAX CRUISE SPEED (Knots)	145 kts	AT 5000 ft. MSL 116 kts	AT MAX CONT PWR 144 kts *	AT 4000 FT MSL 145 kts
ROTOR SPEED	293 RPM at 100% 314 RPM at 107%	394 RPM, 100%	385 RPM, 100%	285 RPM, 100%

	SIKORSKY S-76		BELL 206-L		AGUSTA A-109		SIKORSKY UH-60A	
MAIN AND TAIL ROTORS	MAIN	TAIL	MAIN	TAIL	MAIN	TAIL	MAIN	TAIL
DIAMETER (ft, in)	44' 0"	8' 0"	37' 0"	5' 5"	35' 1"	6' 8"	53' 8"	11' 0"
NUMBER OF BLADES	4	4	2	2	4	2	4	4
CHORD	15.6"	6.5"	13.0"	5.2"	13.2"	7.9"	20.7"	
BLADE LOAD (lb/ft^2)	88	86.3	97.3		72.3	85.0		
PERIPHERAL VELOCITY (fps)	675	674	763		728	728	696	657

*NOTE: DIFFERENT SOURCES USED SLIGHTLY DIFFERENT TERMINOLOGY AND PROVIDED SLIGHTLY DIFFERENT INFORMATION.

REFERENCES: PERSONNAL COMMUNICATION FROM HELICOPTER MANUFACTURERS AND 1979-1980, JANES, ALL THE WORLDS AIRCRAFT.

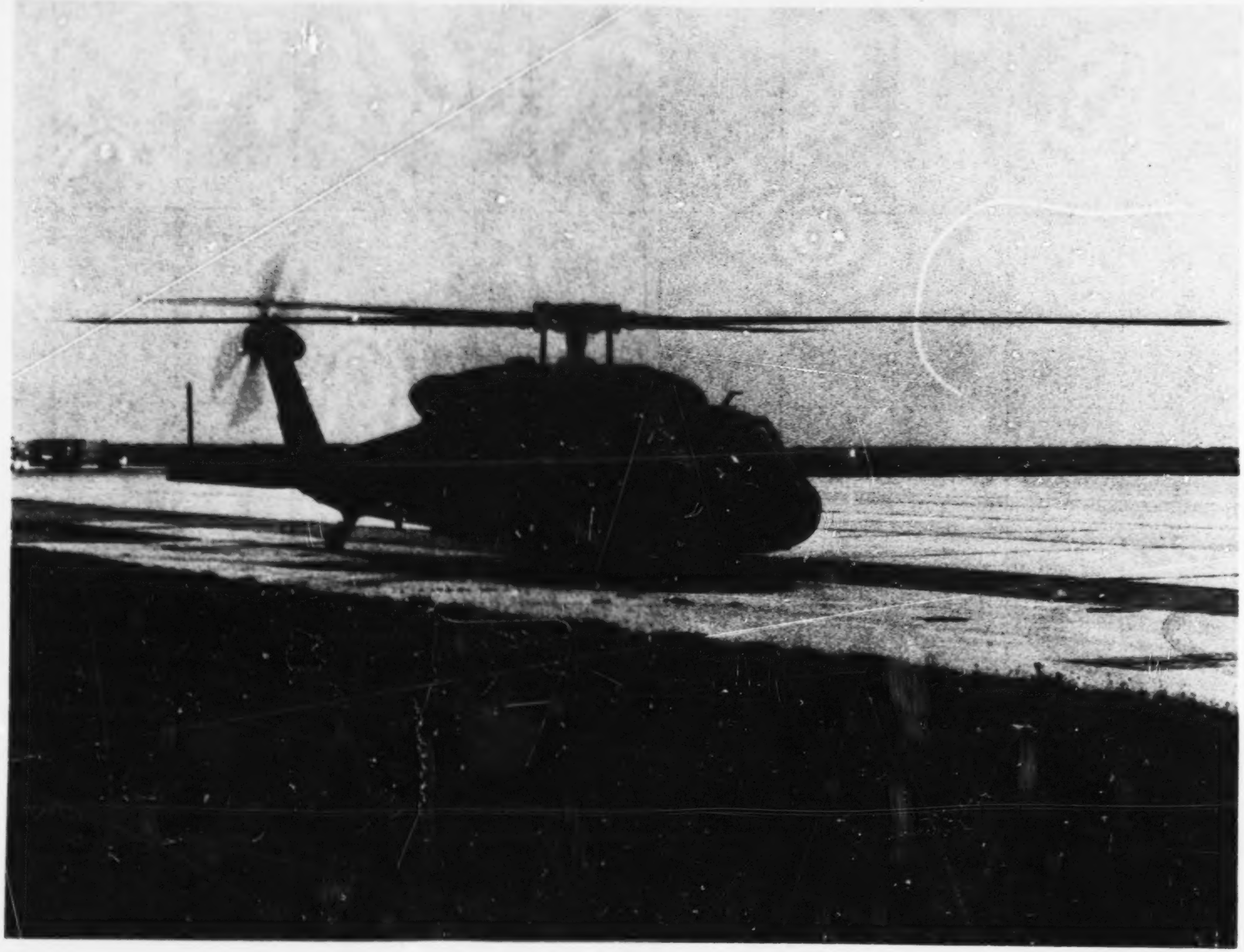


Fig. 2.3.1
Sikorsky UH-60A, "Blackhawk"

Fig. 2.3.2
Sikorsky S-76, "Spirit"

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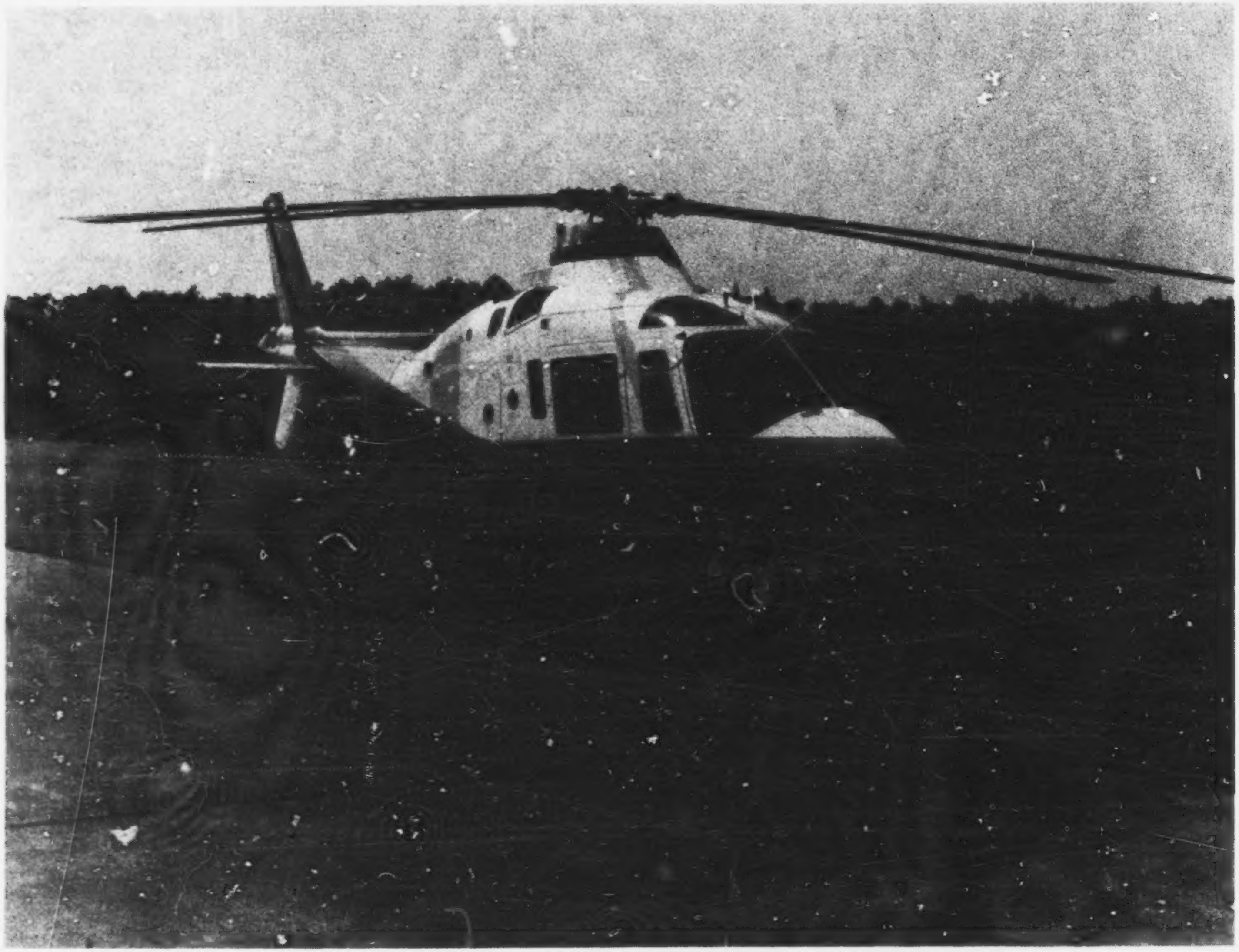

Fig. 2.3.3
Agusta A-109

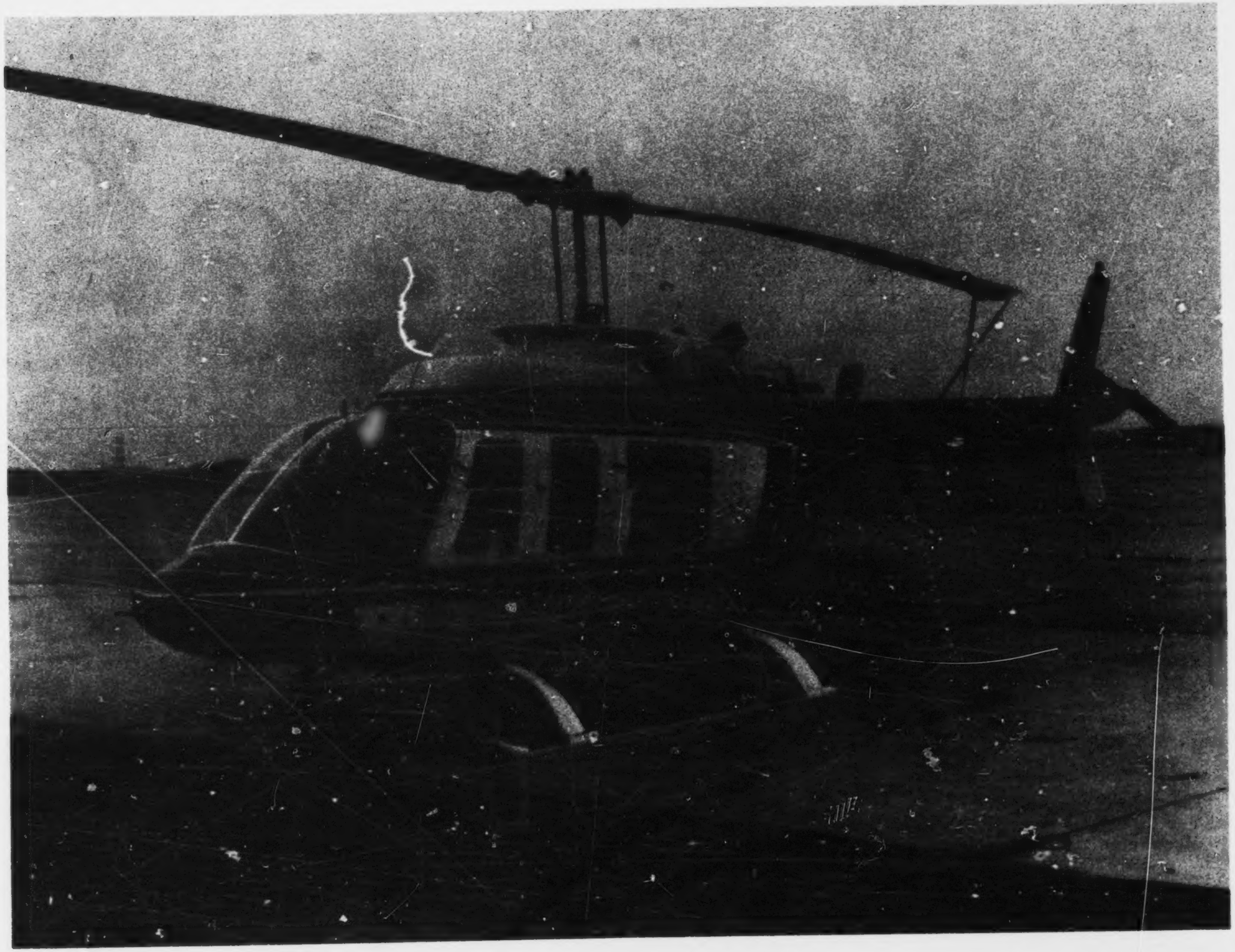

Fig. 2.3.4
Bell, 206-L

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3.0 Noise Data Reduction - The analog magnetic tape recordings analyzed at the TSC facility in Cambridge, Massachusetts, were fed into magnetic disc storage after filtering and digitizing using the GenRad 1921 one-third octave real-time analyzer. Recording system frequency response adjustments were applied, assuring overall linearity of the recording reduction system. The stored 24, one-third octave sound pressure levels (SPLs) for each of the one-half second integration periods making up each event comprise the base of "raw data." Data reduction followed the basic procedures defined in Federal Aviation Regulation (FAR) Part 36. The following sections describe the steps involved in arriving at final values of EPNL.

3.1 Spectral Shaping - The raw spectral data were adjusted by sloping the spectrum shape at -2 dB per one-third octave for those one-third octaves (above 1.25 kHz) where the signal-to-noise ratio was less than 5 dB. This procedure was applied in cases involving no more than 9 "missing" one-third octaves. The shaping of the spectrum over this range (9 bands) was conducted in order to minimize EPNL data loss. This spectral shaping methodology deviates from the FAR 36 procedures in that the extrapolation includes four more missing bands than normally allowed. However, in this specific case, it is felt that use of the technique is justified as the high freauency spectral shape for most helicopter is observed to fall off regularly at 2 dB per one-third octave.

3.2 Bandsharing of Tones - All calculations of PNLTM included testing for the presence of band sharing and adjustment in accordance with the procedures defined in FAR 36, Appendix B, Section B 36.2.3.3.

3.3. Tone Corrections - Tone corrections are computed using the full spectra containing 24, one-third octave bands. Computations begin with band 1 rather than band 3 (as specified for CTOL aircraft in FAR 36 in recognition of the strong low frequency tonal content of helicopter spectra.

3.4 Low Frequency Influence on Tone Corrections - In order to portray the prominence of low frequency influence on tone corrections values, the EPNL has also been computed with the deletion of all tone corrections below 800 Hz. The difference between the full spectrum procedure and the abbreviated procedure is shown as Delta EPNL in Appendix A.

3.5 Corrected Data: Position and Atmospheric Absorption Corrections - "As Measured" data were used as the basis from which to compute the "Corrected" data. The process of correcting data for position and atmospheric absorption included:

- Adjusting the measured 24 one-third octave SPLs of the PNLTM spectra to the standard acoustical data conditions utilizing 10 meter meteorological data interpolated from NWS radiosonde data.

- Adjusting for the change in atmospheric absorption associated with the difference in slant range between the actual and reference position of the helicopter at the time of PNLTM.

- Adjusting for spherical spreading attenuation associated with the difference in slant range between the actual and reference position of the helicopter at the time of PNLTM.

3.6 Distance-Duration and Speed Corrections - The traditional methodology for correcting single event cumulative metrics (EPNL or SEL) for non-reference duration (associated with non-reference altitude) is to use the expression $10 \log (d_1/d_2)$, which follows from the equation SEL=10 log(DUR)+C. This latter relationship can be derived from consideration of source directivity as an idealized monopole, dipole or quadrapole radiator of acoustical energy. In each case the equation is supplemented by the addition of a specific constant (C) appropriate to the particular directivity characteristic. This constant eventually cancels out of the equation for "change in level." In any event the methodology assumes the aircraft radiates acoustical energy in an orderly, classically theoretical manner. In the case of helicopters the acoustical radiation patterns are hybrids; combinations of monopoles, dipoles, quadrapoles and various other anomolous acoustical interactions. Accordingly, the $10 \log (d_1/d_2)$ methodology (a first order approximation) may be improved upon. In order to make the most accurate correction of non-reference data to reference conditions a technique has been developed which uses empirical data rather than the $10 \log(d_1/d_2)$ technique.

This procedure uses "As Measured" acoustical data (see Appendix A) to develop "k" values (as substitutes for "10" in the equation above) for each acoustical event; thus relating the 10 dB down duration time (in seconds) to the energy metric (SEL or EPNL). The "k" values are derived as follows:

$$\text{SEL}=\text{dBAm}+k(A) \log (\text{DUR}(A)) \text{ then}$$
$$k(A)=(\text{SEL}-\text{dBAm})/\log(\text{DUR}(A))$$

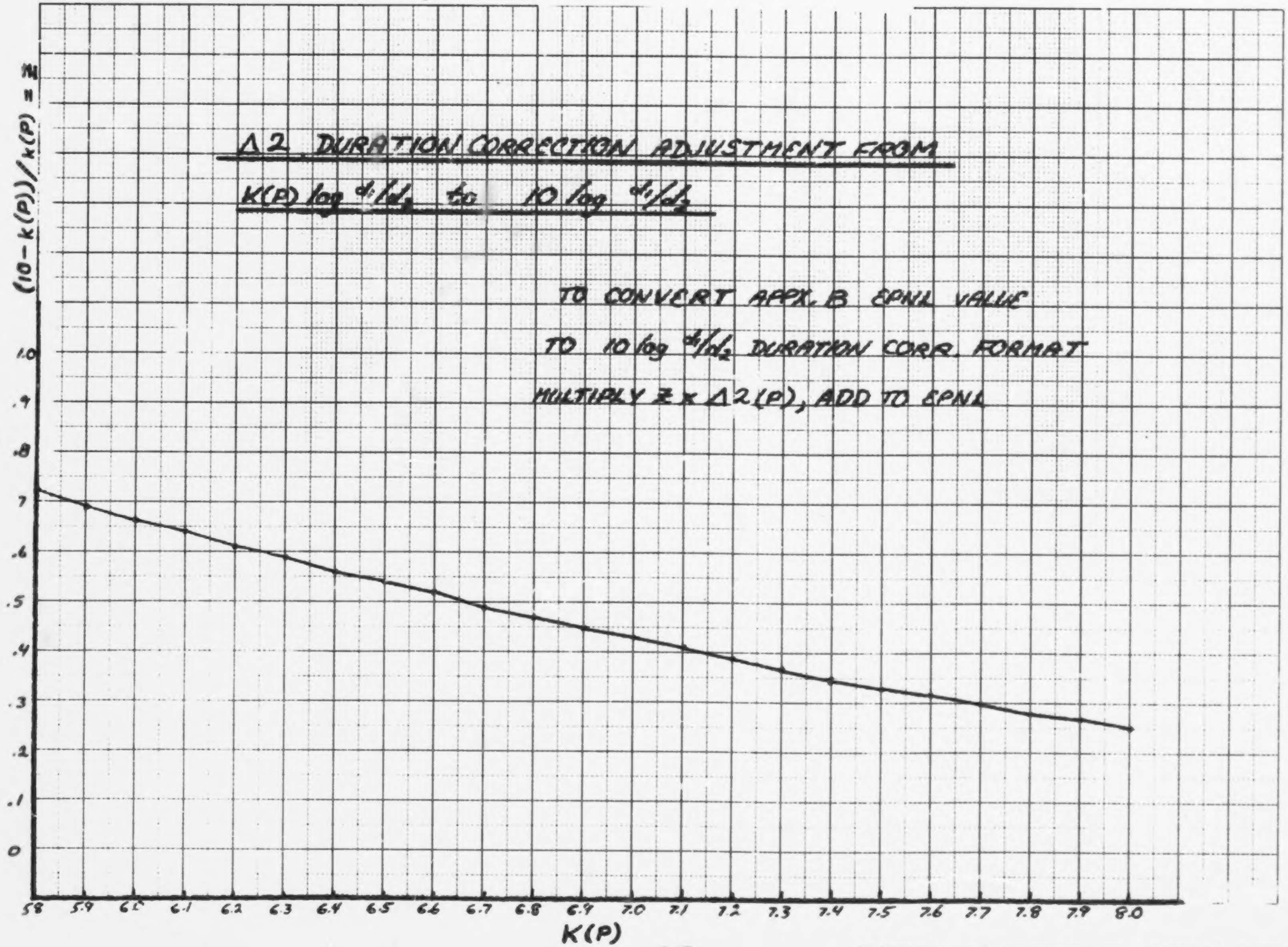
In the case of PNLT-based metrics, it is necessary to modify the equation in order to account for the EPNL normalizing time constant (10 seconds) where

$$\text{EPNL}=\text{PNLTM}+k(P) \log (\text{DUR}(P))-10$$
$$k(P)=(\text{EPNL}+10-\text{PNLTM})/\log(\text{DUR}(P))$$

As the event duration is influenced by both speed and distance, $k \log(d_1/d_2)$ can be used to account for distance duration affects while $k \log (V_2/V_1)$ could be used to account for speed duration affects. The only assumptions are that 10dB down duration time is directly proportional to distance and inversely proportional to speed. This is a reasonable assumption for slant distance encountered in this test. Thus a complete equation for all duration affects could be written $\Delta 2=k \log(d_1/d_2)+k \log(V_2/V_1)$.

While the necessary information is available in this report for application of speed-duration corrections no such corrections have been applied to Appendix B data. This course has been taken in order to allow the reader the flexibility of utilizing his own technique(s) and in recognition that speed affects on helicopter noise remains a developmental and often controversial topic.

FIGURE 3.6.1


Δ2 DURATION CORRECTION ADJUSTMENT FROM
K(P) log d1/d2 to 10 log d1/d2
TO CONVERT APPX. B EPNL VALUE
TO 10 log d1/d2 DURATION CORR. FORMAT
MULTIPLY Z x Δ2(P), ADD TO EPNL
(10-k(P))/k(P) = Δ2
1.0
.9
.8
.7
.6
.5
.4
.3
.2
.1
0
5.8
5.9
6.0
6.1
6.2
6.3
6.4
6.5
6.6
6.7
6.8
6.9
7.0
7.1
7.2
7.3
7.4
7.5
7.6
7.7
7.8
7.9
8.0
K(P)

Also on the topic of duration corrections, some readers might be interested in seeing how the Appendix B, EPNL values would change if the traditional $10 \log (d_1/d_2)$ methodology had been used. Figure 3.6.1 provides a quick technique in which the k(P) value for any event is used to find a constant "Z". The adjustment is accomplished by simply multiplying "Z" times $\Delta 2(P)$ and adding the produce to the listed EPNL.

Regarding the topic of source-speed corrections the relationship between maximum sound level "L", (dBAm or PNLTM) and airspeed can be easily determined. By taking the slope of the curve $\left(\frac{dL}{dv}\right)$ at the point of interest and multiplying by the velocity deviation, $(V_T - V_R)$ one can obtain a correction value. Again, this report makes no source-speed corrections, however it does provide the information necessary for the reader to do so.

3.7 Other Metrics - In addition to the EPNL/PNLT family of metrics and the SEL/dBA family, the overall sound pressure level is presented as part of the "As Measured" data set in Appendix A.

3.8 Analysis System Time Constant/Slow Response - The TSC data analysis system utilizes a dynamic response time in the processing software which is equivalent to the sound level meter "slow response" characteristics. As cited above, this effective response is required under provisions of FAR-36.

4.0 Data Organization/Appendix Structure - The remainder of this report contains the data sets acquired during the measurement program. Each appendix contains its own table of contents or structural outline at the beginning. Relevant information and cross references are also provided and special abbreviations are identified. The appendicies are presented in the following order:

Appendix	
A	"As Measured" Noise Data - This appendix contains acoustical data prior to application of any correction.
B	Corrected Noise Data - This appendix contains acoustical data corrected to reference conditions. Tracking and position data used for corrections are then presented in Appendix C.
C	Flight Path Tracking Plots and Position Data - These plots and tables provide tracking and position information in great detail.
D	Helicopter Cockpit Data - These tables present cockpit instrument readings transcribed from color slides taken during individual flyover events .
E	Meteorological Data - The tables and plots provide detailed temperature, relative humidity, and wind vector information taken during the measurement program.

APPENDIX A

"AS MEASURED ACOUSTICAL DATA"

Appendix A

Appendix A is the "heart" of this report in that it presents the basic acoustical data set.

Appendix B which provides corrected data is subject to all of the usual debate which surrounds aircraft noise data correction procedures.

A brief synopsis of Appendix A data column headings is presented below:

EV	Event Number which corresponds across the board to other appendicies referenced by test date.
EPNL	Effective Perceived Noise Level, the International noise certification metric.
NEL	Noise Exposure Level considered herein as synonomous with Sound Exposure Level (SEL), the time integration of the dBA time history over the 10dB down time. SEL is the metric most useful in developing noise contours.
dBAm	A-Weighted Sound Level (maximum), often abbreviated dB(A) the most widely used metric in community noise assessment.
OASPL	Overall Sound Pressure Level, the measure of maximum (slow response) acoustic pressure.
PNL(M)	Perceived Noise Level, a metric used in developing PNLT and EPNL.
PNLTM	Tone corrected perceived noise level, an adjusted PNL which accounts for additional annoyance associated with audible tones.
DUR(A)	The 10dB down duration time for the dBA time history.
DUR(P)	The 10dB down duration time for the PNLT time history.
TC	Tone Correction
Delta**	The change in EPNL assuming tones 800 Hz and below are pseudotones and excluding them from the PNLT calculations

Each set of data is headed by the microphone location, site number and test date. The target reference condition is specified above each data subset. Actual testing parameters can be verified by crosschecking with Appendix C and Appendix D (tracking and cockpit data).

Attachment

Appendix A

Summary "As Measured" Noise Level Data are presented.

The key to the table numbering system is as follows:

Table No. A. 1-1. 1

Appendix No. ____________ A.

Helicopter No. & operation ______________ 1-1.

Microphone location ____________________________ 1

	Takeoff Approach	Flyover 500 ft	Flyover 300-1500 ft	Type	Date
Table No.	A. 1-1,	1-2,	1-3	Sikorsky UH-60A	June 22, 1980
	2-1,	2-2,	2-3	Sikorsky S-76	June 23, 1980
	3-1,	3-2,	3-3	Augusta A-109	June 24, 1980
	4-1,	4-2,	4-3	Sikorsky S-76	June 25, 1980
	5-1,	5-2,	5-3	Sikorsky UH-60A	June 25, 1980
	6-1,	6-2,	6-3	Bell 206L	June 26, 1980
	A. 7-1,	7-2,	7-3	Sikorsky UH-60A	June 26, 1980

Microphone Location	1	centerline-center
	1H	centerline-center 10 meter
	1G	centerline-center (flush)
	2	centerline 150m west
	3	centerline 150m east
	4	sideline 164m north
	5	sideline 150m south
	5G	sideline 150m south (flush)
	6	sideline 284m north

TABLE NO. A.1-1.1 (REV.1)

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
8/26/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
16	97.2	92.9	84.2	94.1	98.2	99.0	15.0	15.0	0.8	-0.6
17	99.1	74.4	87.7	99.1	102.2	102.9	11.5	10.5	0.8	-0.5
18	99.2	94.4	87.5	99.5	102.0	102.9	11.5	10.5	0.8	-0.5
19	98.9	94.1	87.2	99.1	101.7	102.6	12.0	11.5	0.8	-0.6
20	99.2	94.5	87.3	99.2	102.0	103.0	11.5	10.5	0.9	-0.5
21	99.0	94.3	87.7	99.1	102.1	102.8	12.0	10.5	0.7	-0.5
22	98.8	94.0	87.0	98.9	101.7	102.5	11.0	10.0	0.8	-0.5
23	99.7	95.1	89.0	99.9	103.1	103.8	11.0	10.5	0.8	-0.6
24	99.2	94.6	87.7	98.6	102.1	102.9	11.0	9.5	0.9	-0.7
Avs.	98.9	94.3	87.2	98.6	101.7	102.5	11.8	10.9	0.8	-0.5
Std Dv	0.7	0.6	1.3	1.7	1.4	1.4	1.2	1.6	0.1	0.1
TAKEOFF										
8	89.8	85.4	77.1	86.7	89.7	91.3	14.0	14.0	1.6	-0.8
9	88.8	84.5	75.9	84.1	87.8	89.9	16.5	22.5	2.0	-0.8
10	88.0	83.9	74.0	84.0	87.6	89.7	18.5	17.5	2.1	-0.9
11	87.7	83.6	73.6	83.3	86.7	88.9	21.0	19.0	2.4	-0.9
12	88.3	84.2	74.3	83.6	88.2	90.4	23.0	17.5	2.2	-0.8
13	88.6	84.4	74.5	84.2	88.1	90.1	20.5	18.5	2.0	-0.9
14	89.1	84.8	74.3	83.0	87.9	90.2	25.0	23.0	2.3	-1.0
15	88.9	84.7	74.0	83.9	87.7	90.0	24.0	22.5	2.3	-0.9
Avs.	88.7	84.4	74.7	84.1	87.9	90.1	20.3	19.3	2.1	-0.9
Std Dv	0.7	0.5	1.2	1.1	0.8	0.7	3.8	3.2	0.2	0.1
500 FT. FLYOVER @ 100 KTS INDICATED AIRSPEED										
52	91.1	87.4	80.3	89.4	92.3	93.6	11.5	12.0	1.3	-0.8
Avs.	91.1	87.4	80.3	89.4	92.3	93.6	11.5	12.0	1.3	-0.8
Std Dv	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-2.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/ 9/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER @ 115 KTS INDICATED AIRSPEED										
27	93.7	90.0	81.9	91.3	94.4	95.2	16.0	16.0	0.9	-0.8
30	92.6	89.1	82.1	89.9	94.3	95.0	11.0	11.5	0.8	-0.7
33	94.1	90.5	82.1	91.0	94.0	95.1	14.0	14.5	1.3	-0.8
36	92.3	88.6	81.2	91.4	93.3	94.6	12.0	12.0	1.4	-0.7
Avs.	93.2	89.5	81.8	90.9	94.0	95.0	13.2	13.5	1.1	-0.8
Std Dv	0.8	0.9	0.4	0.7	0.5	0.3	2.2	2.1	0.3	0.0
500 FT. FLYOVER @ 132 KTS INDICATED AIRSPEED										
26	94.5	91.1	84.1	94.9	96.1	97.1	10.0	11.0	1.6	-0.8
29	94.9	91.5	83.9	93.8	95.9	97.4	11.5	11.5	1.6	-0.8
32	94.4	91.1	85.1	93.4	97.3	98.0	10.0	10.5	0.7	-0.5
35	94.4	90.7	83.2	93.4	95.4	96.5	11.5	12.0	1.3	-0.7
Avs.	94.5	91.1	84.0	93.9	96.2	97.2	10.7	11.2	1.3	-0.7
Std Dv	0.2	0.3	0.8	0.7	0.8	0.6	0.9	0.6	0.4	0.1
500 FT. FLYOVER @ 152 KTS INDICATED AIRSPEED										
25	96.1	92.6	84.2	97.1	96.5	97.7	12.0	12.5	1.1	-0.6
28	95.9	92.0	86.0	97.4	98.4	99.3	9.5	12.5	0.9	-0.6
31	97.5	94.2	87.7	98.5	99.7	101.1	10.0	10.0	1.4	-0.7
34	97.1	93.7	86.6	98.2	99.1	100.1	10.5	10.5	1.2	-0.6
Avs.	96.6	93.1	86.1	97.8	98.4	99.5	10.5	11.4	1.2	-0.6
Std Dv	0.8	1.0	1.5	0.7	1.4	1.5	1.1	1.3	0.2	0.1
500 FT. FLYOVER @ 165 KTS INDICATED AIRSPEED										
49	95.6	91.5	84.2	99.9	97.4	98.6	11.5	11.5	1.3	-0.5
50	97.6	[illegible].6	87.2	100.3	99.6	100.6	9.5	12.0	1.0	-0.5
51	95.9	91.9	84.2	99.3	97.0	98.1	12.0	12.5	1.1	-0.6
Avs.	96.4	92.3	85.2	99.8	98.0	99.1	11.0	12.0	1.1	-0.5
Std Dv	1.1	1.1	1.7	0.5	1.4	1.3	1.3	0.5	0.2	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-3.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/ 9/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
43	-	94.5	89.1	100.9	101.4	102.5	6.0	-	1.0	-
44	98.9	95.3	89.3	101.9	102.1	103.2	7.5	7.5	1.1	-0.6
Avs.	98.9	94.9	89.2	101.4	101.8	102.8	6.7	7.5	1.1	-0.6
Std Dv	-	0.6	0.1	0.7	0.5	0.5	1.1	-	0.0	-
700 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
41	92.9	90.0	81.8	93.5	93.9	95.1	14.0	14.5	1.4	-0.6
42	93.2	90.0	81.9	94.0	93.4	94.4	16.5	17.5	1.4	-0.6
Avs.	93.1	90.0	81.8	93.8	93.6	94.7	15.2	16.0	1.4	-0.6
Std Dv	0.2	0.0	0.1	0.4	0.4	0.5	1.8	2.1	0.0	0.0
1000 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
1	91.6	88.6	80.4	93.3	92.3	93.1	14.5	15.5	1.0	-0.6
2	91.6	88.3	78.4	92.5	90.5	92.0	20.0	19.5	1.7	-0.8
3	91.4	88.3	78.1	92.1	89.9	91.4	20.5	19.5	1.5	-0.6
4	91.9	89.1	79.7	91.4	90.3	91.6	19.5	21.5	1.6	-0.8
5	91.3	88.5	79.5	91.9	90.9	92.0	17.0	20.0	1.2	-0.5
6	92.2	89.3	80.1	92.6	91.9	93.6	17.0	17.0	1.9	-0.8
40	91.4	88.7	79.3	91.9	90.7	91.9	17.5	16.5	1.2	-0.7
47	90.0	87.2	78.1	91.2	90.0	90.9	22.5	22.5	0.9	-0.8
48	90.4	87.5	78.8	90.9	90.0	91.1	16.5	19.5	1.3	-0.5
Avs.	91.3	88.4	79.2	92.0	90.7	92.0	18.3	19.1	1.4	-0.7
Std Dv	0.7	0.7	0.9	0.8	0.9	0.9	2.5	2.3	0.3	0.1
1500 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
37	-	86.2	76.0	89.9	87.5	89.0	21.0	-	1.4	-
38	-	85.8	75.9	88.4	86.8	88.2	22.5	-	1.4	-
45	88.5	86.0	75.2	89.2	86.9	88.2	29.5	27.5	1.3	-0.7
46	89.7	86.8	76.3	91.1	88.8	90.1	23.0	19.5	1.3	-0.8
Avs.	89.1	86.2	75.8	89.7	87.5	88.9	24.0	23.5	1.4	-0.7
Std Dv	0.9	0.4	0.5	1.2	0.9	0.9	3.8	5.7	0.1	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.1-1.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/29/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
16	102.2	97.9	88.9	99.7	102.1	102.7	16.5	16.5	0.6	-0.3
17	101.2	96.9	89.6	100.0	103.3	103.8	12.0	12.0	0.4	-0.2
18	102.0	97.5	90.2	101.8	104.3	104.6	12.0	11.5	0.5	0.1
19	101.9	97.5	90.1	101.4	104.1	104.5	12.5	12.5	0.4	-0.1
20	102.3	97.8	90.2	101.2	104.5	105.2	11.5	11.0	0.6	-0.1
21	102.1	97.7	90.7	102.1	104.6	104.9	11.5	11.0	0.2	-0.2
22	101.9	97.5	90.1	101.1	104.4	105.0	11.0	10.5	0.6	-0.2
23	102.4	98.0	91.9	102.2	105.1	105.4	10.5	11.5	0.3	-0.1
24	101.9	97.6	90.5	100.9	104.1	104.7	11.0	11.0	0.7	-0.2
Avg.	102.0	97.6	90.2	101.2	104.1	104.5	12.1	11.9	0.5	-0.2
Std Dv	0.3	0.3	0.8	0.9	0.9	0.8	1.8	1.8	0.1	0.1
TAKEOFF										
8	94.1	89.4	81.3	89.9	93.6	95.3	13.5	14.5	2.0	-1.0
9	93.0	88.7	80.0	87.4	91.6	93.5	16.0	17.5	1.8	-1.0
10	92.3	88.0	78.9	87.2	90.7	92.5	17.0	18.0	1.8	-1.0
11	91.7	87.6	78.1	85.9	89.6	91.3	19.5	20.5	2.5	-1.0
12	92.2	87.9	78.5	87.2	90.6	92.6	17.5	18.0	2.5	-1.0
13	93.9	89.5	79.9	87.8	92.6	94.3	18.5	18.0	2.1	-1.0
14	93.5	89.1	79.1	87.1	91.7	93.4	20.5	21.0	1.7	-1.0
15	92.9	88.7	78.8	87.3	91.2	93.3	19.0	18.5	2.5	-0.9
Avg.	92.9	88.6	79.3	87.5	91.4	93.3	17.7	18.2	2.1	-1.0
Std Dv	0.8	0.7	1.0	1.1	1.3	1.2	2.2	2.0	0.3	0.0
500 FT. FLYOVER @ 100 KTS INDICATED AIRSPEED										
52	95.1	91.5	84.4	93.2	96.5	97.7	10.5	12.0	1.2	-0.5
Avg.	95.1	91.5	84.4	93.2	96.5	97.7	10.5	12.0	1.2	-0.5
Std Dv	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-2.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/10/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER @ 115 KTS INDICATED AIRSPEED										
27	97.3	93.5	85.7	95.1	98.2	99.5	14.5	15.5	1.3	-0.4
30	96.3	92.5	85.7	94.5	98.4	99.0	10.5	11.0	0.9	-0.4
33	97.9	94.3	86.3	95.4	98.6	99.6	13.0	13.5	1.0	-0.3
36	96.5	92.6	85.4	96.0	97.6	98.6	11.5	12.5	1.2	-0.6
Avs.	97.0	93.2	85.8	95.2	98.2	99.2	12.4	13.1	1.1	-0.4
Std Dv	0.8	0.8	0.4	0.6	0.4	0.5	1.7	1.9	0.2	0.2
500 FT. FLYOVER @ 132 KTS INDICATED AIRSPEED										
26	98.0	94.5	87.5	97.8	99.9	100.9	9.0	10.0	1.1	-0.4
29	98.9	95.4	88.2	97.8	100.4	101.6	10.0	11.5	1.1	-0.4
32	98.4	94.9	88.0	97.4	100.6	101.6	10.5	10.5	1.3	-0.4
35	98.5	94.9	87.3	97.4	99.9	100.7	11.0	12.0	1.0	-0.4
Avs.	98.5	94.9	87.8	97.6	100.2	101.2	10.1	11.0	1.1	-0.4
Std Dv	0.4	0.4	0.5	0.2	0.4	0.5	0.9	0.9	0.1	0.0
500 FT. FLYOVER @ 152 KTS INDICATED AIRSPEED										
25	99.7	96.1	88.2	99.4	100.5	101.5	11.0	12.5	1.2	-0.4
28	99.3	95.3	89.1	99.4	101.9	103.0	9.0	11.5	1.1	-0.4
31	101.1	97.8	91.3	101.0	103.1	104.2	9.5	9.5	1.1	-0.4
34	100.4	96.7	89.8	100.7	102.7	103.9	10.5	10.0	1.2	-0.5
Avs.	100.1	96.5	89.6	100.1	102.1	103.2	10.0	10.9	1.2	-0.4
Std Dv	0.8	1.1	1.3	0.8	1.1	1.2	0.9	1.4	0.0	0.1
500 FT. FLYOVER @ 165 KTS INDICATED AIRSPEED										
49	100.8	96.9	90.9	102.3	102.9	103.8	9.5	10.5	1.2	-0.3
50	101.4	97.6	91.6	102.6	104.0	104.9	9.5	11.0	0.8	-0.5
51	99.9	95.9	89.1	101.5	101.1	102.1	11.0	12.0	1.2	-0.5
Avs.	100.7	96.8	90.5	102.1	102.7	103.6	10.0	11.2	1.1	-0.4
Std Dv	0.8	0.8	1.3	0.5	1.5	1.4	0.9	0.8	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

BEST DOCUMENT AVAILABLE

TABLE NO. A.1-3.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/10/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
43	-	99.2	94.3	104.1	106.5	107.5	6.0	-	1.0	-
44	102.6	99.0	93.6	104.3	106.0	107.2	6.5	7.0	1.2	-0.4
Avs.	102.6	99.1	93.9	104.2	106.3	107.3	6.2	7.0	1.1	-0.4
Std Dv	-	0.2	0.5	0.2	0.3	0.2	0.4	-	0.1	-
700 FT. FLYOVEP @ 150 KTS INDICATED AIRSPEED										
41	97.1	93.8	86.0	96.2	98.0	99.0	13.5	15.0	1.0	-0.3
42	97.2	93.7	85.6	97.0	97.5	99.0	16.5	16.0	1.5	-0.5
Avs.	97.1	93.8	85.8	96.6	97.7	99.0	15.0	15.5	1.3	-0.4
Std Dv	0.1	0.1	0.3	0.6	0.3	0.0	2.1	0.7	0.4	0.1
1000 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
1	95.3	92.1	83.5	95.1	95.8	96.6	14.5	16.0	0.9	-0.4
2	95.3	91.7	81.5	94.5	93.6	95.1	19.5	20.0	1.7	-0.5
3	95.4	91.9	82.3	94.9	94.5	96.0	19.5	19.0	1.6	-0.5
4	96.0	93.0	84.5	94.7	95.2	96.7	16.0	19.0	1.5	-0.4
5	95.5	92.6	83.7	94.5	95.5	96.3	16.5	18.0	0.9	-0.3
6	96.4	93.3	83.9	95.4	95.9	96.9	16.5	17.0	1.0	-0.5
39	95.6	92.4	82.9	94.6	94.8	95.9	17.0	20.0	1.0	-0.4
40	95.1	92.1	82.6	94.1	95.1	96.1	18.0	16.5	0.9	-0.5
47	94.9	91.6	82.3	94.4	94.3	95.3	22.0	22.0	1.2	-0.4
48	94.9	91.8	83.0	93.8	94.7	95.8	16.5	17.0	1.3	-0.4
Avs.	95.5	92.2	83.0	94.6	94.9	96.1	17.6	18.4	1.2	-0.4
Std Dv	0.5	0.6	0.9	0.5	0.7	0.6	2.2	1.9	0.3	0.1
1500 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
37	-	90.1	79.7	92.6	92.1	93.2	19.0	-	1.1	-
38	-	93.7	83.9	96.9	96.0	97.0	23.5	-	1.0	-
45	92.8	89.9	79.5	91.9	91.4	92.5	26.0	25.0	1.1	-0.4
46	93.7	90.5	80.0	93.6	92.5	94.1	23.0	19.5	1.7	-0.5
Avs.	93.2	91.1	80.8	93.7	93.0	94.2	22.9	22.3	1.2	-0.5
Std Dv	0.7	1.8	2.1	2.2	2.0	2.0	2.9	3.9	0.3	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.1-1.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/ 9/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H CENTERLINE - CENTER 10 METER JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
16	96.3	92.1	83.0	92.5	97.0	97.5	16.5	15.5	0.5	-0.3
17	99.3	94.7	87.1	99.0	101.7	102.3	12.5	10.5	0.6	-0.2
18	100.1	95.1	87.7	100.7	102.9	103.4	12.0	10.5	0.5	-0.2
19	100.3	95.5	88.3	101.2	103.3	103.9	12.0	10.0	0.6	-0.3
20	100.8	96.2	89.2	101.4	104.2	104.9	11.0	9.5	0.7	-0.2
21	100.7	95.8	89.1	102.3	103.9	104.2	10.5	10.0	0.4	-0.3
22	100.3	95.7	88.9	101.4	103.9	104.5	10.5	9.0	0.6	-0.2
23	99.4	95.0	88.9	101.0	102.9	103.1	11.0	10.0	0.2	-0.1
24	99.1	94.5	87.8	100.1	102.5	103.2	10.0	9.5	0.7	-0.3
Avs.	99.6	95.0	87.8	100.0	102.5	103.0	11.8	10.5	0.5	-0.2
Std Dv	1.4	1.2	1.9	3.0	2.2	2.2	2.0	1.9	0.1	0.0
TAKEOFF										
8	90.2	85.5	77.4	86.0	90.5	92.0	14.5	14.0	1.7	-0.9
9	89.3	84.9	76.1	83.6	88.5	90.0	22.0	22.5	2.2	-0.9
10	88.6	84.3	74.6	83.6	87.5	89.4	24.0	23.0	2.4	-0.9
11	88.1	84.0	74.0	82.4	86.0	88.3	26.5	25.5	2.6	-0.8
12	88.4	84.4	74.5	83.8	87.2	89.5	30.5	21.5	2.7	-0.4
13	91.4	86.8	77.0	85.7	89.9	92.2	24.0	22.0	2.5	-0.9
14	90.8	86.4	75.8	85.1	88.9	91.4	27.5	25.0	2.5	-0.8
15	-	86.2	75.6	85.4	88.9	91.5	26.0	-	2.6	-
Avs.	89.6	85.3	75.6	84.5	88.4	90.6	24.4	21.9	2.4	-0.8
Std Dv	1.3	1.1	1.2	1.3	1.5	1.4	4.7	3.8	0.3	0.2
500 FT. FLYOVER @ 100 KTS INDICATED AIRSPEED										
52	90.8	87.2	80.2	85.6	92.2	93.3	11.5	13.0	1.1	-0.6
Avs.	90.8	87.2	80.2	85.6	92.2	93.3	11.5	13.0	1.1	-0.6
Std Dv	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-2.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/10/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H CENTERLINE - CENTER 10 METER JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER @ 115 KTS INDICATED AIRSPEED										
27	93.3	89.4	81.4	91.8	94.6	95.2	16.0	16.0	0.7	-0.6
30	92.6	88.6	81.3	91.8	94.6	95.1	11.0	12.0	0.5	-0.5
33	94.0	90.2	82.0	91.9	94.8	95.6	14.5	14.0	1.1	-0.6
36	92.6	88.7	81.8	91.7	94.2	94.9	11.5	13.5	0.7	-0.6
Avs.	93.1	89.2	81.6	91.8	94.5	95.2	13.2	13.9	0.7	-0.6
Std Dv	0.6	0.7	0.3	0.1	0.3	0.3	2.4	1.7	0.3	0.0
500 FT. FLYOVER @ 132 KTS INDICATED AIRSPEED										
26	94.3	90.4	83.1	94.2	96.1	97.1	10.0	11.0	1.4	-0.4
29	94.7	91.0	84.1	94.1	96.7	97.8	10.0	11.0	1.4	-0.5
32	94.8	91.2	84.5	93.4	97.5	98.1	10.5	10.5	0.7	-0.4
35	94.4	90.6	83.2	93.6	96.2	96.8	12.0	12.5	0.6	-0.6
Avs.	94.5	90.8	83.7	93.8	96.6	97.5	10.6	11.2	1.1	-0.5
Std Dv	0.2	0.3	0.7	0.4	0.6	0.6	0.9	0.9	0.4	0.1
500 FT. FLYOVER @ 152 KTS INDICATED AIRSPEED										
25	95.9	92.0	84.4	96.6	96.8	97.9	11.0	11.5	1.1	-0.7
28	95.9	91.8	84.9	96.4	97.7	98.5	12.5	13.0	0.8	-0.6
31	97.1	93.5	86.6	96.9	98.9	100.2	10.0	10.0	1.4	-0.7
34	96.7	93.0	86.0	96.5	98.6	99.9	11.0	11.0	1.3	-0.8
Avs.	96.4	92.6	85.5	96.6	98.0	99.1	11.1	11.4	1.2	-0.7
Std Dv	0.6	0.8	1.0	0.2	0.9	1.1	1.0	1.2	0.3	0.1
500 FT. FLYOVER @ 165 KTS INDICATED AIRSPEED										
49	97.7	93.6	87.3	99.0	100.0	100.8	10.0	10.5	1.2	-0.7
50	98.6	94.5	88.0	99.5	100.9	101.6	10.5	11.5	1.0	-0.5
51	96.6	92.2	85.9	98.5	98.3	99.1	9.5	11.5	1.3	-0.7
Avs.	97.7	93.4	87.1	99.0	99.7	100.5	10.0	11.2	1.2	-0.6
Std Dv	1.0	1.1	1.1	0.5	1.3	1.3	0.5	0.6	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-3.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/10/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H CENTERLINE - CENTER 10 METER JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
44	99.7	96.1	90.3	101.1	103.5	104.3	7.0	7.5	0.9	-0.5
Avs.	99.7	96.1	90.3	101.1	103.5	104.3	7.0	7.5	0.8	-0.5
Std Dv	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
700 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
41	93.4	90.0	81.8	93.2	94.5	95.6	13.5	14.0	1.2	-0.6
42	94.1	90.4	82.4	93.3	94.4	95.6	16.0	16.0	1.2	-0.7
Avs.	93.8	90.2	82.1	93.2	94.4	95.6	14.7	15.0	1.2	-0.7
Std Dv	0.5	0.3	0.4	0.0	0.1	0.0	1.8	1.4	0.0	0.1
1000 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
1	88.4	86.0	77.1	86.4	88.2	89.2	14.5	15.5	1.3	-0.6
2	87.7	84.8	74.5	86.1	86.1	87.9	19.5	19.0	1.8	-0.8
3	88.4	85.6	76.3	86.1	87.8	89.0	18.0	19.0	1.5	-0.7
4	88.7	86.4	77.9	86.6	88.4	89.7	17.0	17.0	1.4	-0.9
5	88.6	86.3	77.7	85.6	89.1	90.2	15.5	15.5	1.1	-0.7
6	89.0	86.5	77.8	86.4	88.2	89.6	15.5	16.5	1.4	-0.8
39	-	88.4	78.5	90.6	90.4	92.1	21.0	-	1.7	-
40	91.3	88.2	78.4	90.6	90.5	91.9	18.0	16.5	1.6	-0.7
47	91.7	88.3	78.6	91.5	90.7	92.3	24.0	22.5	1.6	-0.9
48	91.8	88.5	79.3	90.9	91.1	92.5	19.5	19.5	1.4	-0.6
Avs.	89.5	86.9	77.6	88.1	89.1	90.5	18.2	17.8	1.5	-0.7
Std Dv	1.6	1.3	1.4	2.4	1.6	1.6	2.9	2.3	0.2	0.1
1500 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
37	-	85.6	75.6	88.3	87.0	88.6	18.0	-	1.6	-
38	88.5	85.6	75.7	87.1	87.6	89.2	22.5	21.5	1.6	-0.7
45	89.3	86.3	75.5	88.4	87.9	89.7	28.5	26.0	1.9	-0.8
46	90.7	87.1	78.3	91.7	91.0	91.6	20.0	19.5	0.6	-0.7
Avs.	89.5	86.2	76.3	88.9	88.3	89.8	22.2	22.3	1.4	-0.7
Std Dv	1.1	0.7	1.4	2.0	1.8	1.3	4.6	3.3	0.5	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.1-1.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/10/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
16	97.7	92.8	84.9	94.5	99.2	99.9	12.5	12.0	0.7	-0.6
17	99.2	94.5	86.5	97.5	101.1	101.7	12.0	11.5	0.6	-0.4
18	100.3	95.4	88.3	100.7	103.3	104.0	11.5	10.0	0.7	-0.4
19	100.3	95.5	88.4	100.7	103.2	103.9	11.5	10.5	0.7	-0.5
20	100.7	96.0	89.0	100.9	103.8	104.5	11.0	9.5	0.8	-0.5
21	100.8	95.9	89.5	101.2	104.1	104.9	10.0	10.0	0.8	-0.6
22	100.3	95.6	89.0	100.8	103.8	104.6	10.5	9.5	0.8	-0.5
23	100.4	95.8	89.4	100.9	103.8	104.5	10.0	9.5	0.7	-0.4
24	100.6	96.0	89.3	100.4	103.6	104.3	10.5	9.5	0.7	-0.5
Avs.	100.0	95.3	88.3	99.7	102.9	103.6	11.1	10.2	0.7	-0.5
Std Dv	1.0	1.0	1.6	2.2	1.7	1.7	0.9	0.9	0.1	0.1
TAKEOFF										
8	-	83.7	75.6	84.7	88.2	89.8	13.0	-	1.7	-
9	-	82.3	74.3	83.0	87.5	89.6	13.0	-	2.1	-
10	87.7	83.8	73.5	81.5	86.8	88.9	27.5	20.0	2.2	-0.9
11	88.0	84.0	73.0	81.4	86.1	88.5	33.0	30.0	2.4	-0.9
12	88.0	84.0	73.5	82.1	87.1	89.2	23.5	21.5	2.2	-1.0
13	88.1	83.9	73.8	82.5	86.8	88.9	24.0	23.0	2.1	-1.0
14	87.6	83.4	72.4	81.7	86.2	88.5	26.5	23.0	2.3	-1.0
15	87.4	83.3	72.8	81.9	85.9	88.1	24.0	22.0	2.2	-1.0
Avs.	87.8	83.6	73.6	82.3	86.8	88.9	23.1	23.3	2.2	-1.0
Std Dv	0.3	0.6	1.0	1.1	0.8	0.6	6.9	3.5	0.2	0.0
500 FT. FLYOVER @ 100 KTS INDICATED AIRSPEED										
52	92.4	88.2	81.6	89.0	94.1	95.8	11.0	10.5	1.7	-0.9
Avs.	92.4	88.2	81.6	89.0	94.1	95.8	11.0	10.5	1.7	-0.9
Std Dv	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-2.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER @ 115 KTS INDICATED AIRSPEED										
27	93.9	90.0	81.5	91.6	94.1	95.3	13.5	14.0	1.2	-0.8
30	93.3	89.6	82.1	91.5	95.3	96.7	13.0	11.5	1.4	-0.6
33	95.2	91.5	84.3	93.2	97.3	98.5	11.5	11.0	1.2	-0.9
36	92.9	89.1	82.2	91.6	94.4	95.2	11.0	12.0	0.8	-0.7
Avg.	93.9	90.1	82.5	92.0	95.3	96.4	12.2	12.1	1.2	-0.8
Std Dv	1.0	1.0	1.2	0.8	1.4	1.5	1.2	1.3	0.3	0.1
500 FT. FLYOVER @ 132 KTS INDICATED AIRSPEED										
26	93.8	90.2	83.7	93.7	95.9	97.0	9.5	10.0	1.1	-0.4
29	94.7	91.3	84.0	93.8	96.4	97.0	11.0	11.0	0.6	-0.6
32	95.1	91.6	85.2	94.3	98.0	99.1	8.5	9.0	1.1	-0.6
35	94.8	91.1	82.9	93.0	95.4	96.6	12.0	12.5	1.3	-0.7
Avg.	94.6	91.1	83.9	93.7	96.4	97.4	10.2	10.6	1.0	-0.5
Std Dv	0.6	0.6	1.0	0.5	1.1	1.1	1.6	1.5	0.3	0.1
500 FT. FLYOVER @ 152 KTS INDICATED AIRSPEED										
25	96.2	92.8	85.1	96.9	97.2	98.5	11.0	12.5	1.2	-0.7
28	95.3	92.0	85.6	96.8	98.1	99.2	9.0	10.0	1.1	-0.5
31	97.9	94.7	87.4	97.6	99.4	101.0	10.5	10.5	1.6	-0.7
34	96.6	93.0	84.6	96.7	97.1	98.3	13.0	13.5	1.3	-0.6
Avg.	96.5	93.1	85.7	97.0	98.0	99.2	10.9	11.6	1.3	-0.6
Std Dv	1.1	1.1	1.2	0.4	1.1	1.2	1.7	1.7	0.2	0.1
500 FT. FLYOVER @ 165 KTS INDICATED AIRSPEED										
49	97.4	93.4	86.9	98.5	99.4	100.9	9.5	10.5	1.6	-0.8
50	97.4	93.8	88.9	98.5	101.2	102.1	8.0	8.5	0.9	-0.4
51	96.5	92.4	85.7	97.0	98.2	99.7	10.5	11.0	1.7	-0.8
Avg.	97.1	93.2	87.2	98.0	99.6	100.9	9.3	10.0	1.4	-0.6
Std Dv	0.5	0.7	1.6	0.9	1.5	1.2	1.3	1.3	0.4	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.1-3.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
43	99.4	95.7	90.1	99.7	103.0	103.8	8.0	8.0	1.1	-0.6
44	100.1	96.5	91.4	101.3	103.8	104.7	7.0	7.0	1.0	-0.7
Avs.	99.7	96.1	90.7	100.5	103.4	104.3	7.5	7.5	1.1	-0.7
Std Dv	0.5	0.5	0.9	1.1	0.5	0.7	0.7	0.7	0.1	0.1
700 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
41	94.4	91.1	83.0	94.0	94.9	96.1	12.5	14.0	1.2	-0.6
42	94.6	91.3	84.1	94.6	95.6	97.4	11.5	12.0	1.8	-0.8
Avs.	94.5	91.2	83.5	94.3	95.3	96.8	12.0	13.0	1.5	-0.7
Std Dv	0.1	0.1	0.8	0.5	0.5	1.0	0.7	1.4	0.4	0.1
1000 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
1	92.7	89.9	81.7	92.9	93.6	94.5	14.5	14.5	0.9	-0.6
2	92.7	89.4	79.4	92.4	91.4	93.0	19.0	18.0	1.6	-0.7
3	92.4	89.3	79.6	92.4	91.4	92.6	19.0	21.0	1.4	-0.7
4	93.6	90.7	82.2	92.3	93.3	94.7	19.0	19.5	1.4	-0.9
5	92.7	90.1	81.3	92.5	92.6	93.7	17.0	19.5	1.1	-0.6
6	93.5	90.7	80.8	92.6	92.2	93.6	18.5	18.5	1.4	-0.8
39	92.0	89.3	78.9	90.5	90.3	91.7	20.0	20.0	1.7	-0.7
40	92.4	89.5	80.4	90.5	91.7	93.2	16.5	17.5	1.9	-0.7
47	91.7	88.6	78.4	90.3	90.1	91.5	20.0	20.0	2.0	-0.9
48	-	88.2	79.4	91.1	91.1	92.4	13.0	-	1.5	-
Avs.	92.6	89.6	80.2	91.7	91.8	93.1	17.6	18.7	1.5	-0.7
Std Dv	0.6	0.8	1.3	1.0	1.2	1.1	2.4	1.9	0.3	0.1
1500 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
37	90.3	87.4	76.7	88.9	87.9	89.3	24.0	29.0	1.5	-0.9
38	-	86.0	77.4	88.2	88.6	89.7	13.0	-	1.1	-
45	-	87.3	75.9	87.8	87.5	89.0	33.5	-	1.5	-
46	90.4	87.2	77.6	90.1	89.4	90.7	23.0	22.5	1.4	-0.7
Avs.	90.3	87.0	76.9	88.7	88.4	89.7	23.4	25.8	1.4	-0.8
Std Dv	0.1	0.7	0.8	1.0	0.8	0.8	8.4	4.6	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.1-1.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LZVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
16	96.9	92.5	83.8	94.4	97.7	98.5	14.5	14.0	0.8	-0.6
17	98.2	93.4	85.7	98.1	100.3	101.1	13.0	12.5	0.9	-0.7
18	97.8	93.0	85.5	97.3	99.3	100.1	13.0	12.5	1.1	-0.6
19	97.9	93.3	85.6	97.6	99.7	100.6	13.5	12.0	1.0	-0.4
20	98.1	93.4	85.6	97.9	100.3	101.3	13.5	12.5	1.0	-0.6
21	98.0	93.3	85.7	97.9	99.8	100.9	13.0	12.5	1.1	-0.6
22	98.0	93.4	86.1	97.8	100.1	101.0	13.0	11.5	0.9	-0.7
23	98.1	93.8	86.2	98.0	100.1	100.8	14.5	12.5	1.1	-0.4
24	97.3	92.8	86.3	97.3	100.2	101.1	11.5	11.0	0.9	-0.6
Avs.	97.8	93.2	85.6	97.4	99.7	100.6	13.3	12.3	1.0	-0.6
Std Dv	0.4	0.4	0.7	1.2	0.8	0.9	0.9	0.8	0.1	0.1
TAKEOFF										
8	92.2	87.4	80.8	89.4	93.8	95.2	9.0	10.0	1.4	-0.6
9	91.7	87.1	79.2	86.4	91.7	93.0	17.5	17.5	1.5	-0.6
10	90.9	86.3	78.4	87.2	91.0	92.4	18.0	18.0	1.3	-0.7
11	90.6	86.1	76.6	86.5	89.8	91.7	21.0	20.0	1.9	-0.7
12	91.1	86.5	78.4	87.1	91.4	92.9	17.5	17.5	1.4	-0.7
13	91.8	86.9	78.9	88.4	91.9	93.4	14.5	15.0	1.6	-0.8
14	91.3	86.7	77.6	86.8	90.7	92.6	18.5	16.5	1.9	-0.8
15	91.2	86.6	77.9	87.5	91.5	92.7	17.0	16.5	1.8	-0.7
Avs.	91.3	86.7	78.5	87.4	91.5	93.0	16.6	16.4	1.6	-0.7
Std Dv	0.5	0.4	1.2	1.0	1.1	1.0	3.6	2.9	0.2	0.1
500 FT. FLYOVER @ 100 KTS INDICATED AIRSPEED										
52	91.7	88.0	80.7	89.3	93.4	94.5	11.5	11.5	1.4	-0.8
Avs.	91.7	88.0	80.7	89.3	93.4	94.5	11.5	11.5	1.4	-0.8
Std Dv	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-2.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
9/11/80

SITE: 3 CENTERLINE - 150 M. EAST JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER @ 115 KTS INDICATED AIRSPEED										
27	91.7	88.0	80.6	90.4	92.9	93.6	14.5	15.0	0.8	-0.7
30	91.8	88.1	80.7	90.2	93.2	94.6	12.5	12.5	1.4	-0.6
33	92.9	89.1	81.5	91.1	94.2	94.8	13.0	15.0	0.6	-0.7
36	91.7	88.0	80.6	91.0	92.7	93.7	12.0	12.5	1.5	-0.7
Avg.	92.0	88.3	80.8	90.7	93.2	94.2	13.0	13.7	1.1	-0.7
Std Dv	0.6	0.5	0.5	0.4	0.7	0.6	1.1	1.4	0.5	0.1
500 FT. FLYOVER @ 132 KTS INDICATED AIRSPEED										
26	93.2	90.0	83.3	93.8	95.4	96.6	9.0	11.5	1.2	-0.5
29	93.9	90.5	82.7	93.6	94.9	95.8	11.0	11.5	1.3	-0.7
32	93.6	90.3	83.9	92.8	96.2	97.0	9.5	10.5	1.1	-0.4
35	93.2	89.7	82.1	92.6	94.4	95.1	11.5	11.5	0.7	-0.6
Avg.	93.5	90.1	83.0	93.2	95.2	96.1	10.2	11.2	1.1	-0.6
Std Dv	0.3	0.4	0.8	0.6	0.8	0.8	1.2	0.5	0.2	0.1
500 FT. FLYOVER @ 152 KTS INDICATED AIRSPEED										
25	94.7	91.2	83.1	95.6	95.1	96.1	13.5	14.0	1.0	-0.6
28	94.9	91.2	83.8	96.8	96.1	97.2	11.5	11.5	1.1	-0.5
31	96.0	92.9	85.3	96.3	97.0	98.3	11.0	11.5	1.2	-0.6
34	96.3	93.0	86.1	97.4	97.8	98.8	10.0	11.0	1.0	-0.6
Avg.	95.5	92.1	84.6	96.5	96.5	97.6	11.5	12.0	1.1	-0.6
Std Dv	0.8	1.0	1.3	0.7	1.2	1.2	1.5	1.4	0.1	0.0
500 FT. FLYOVER @ 165 KTS INDICATED AIRSPEED										
49	97.3	93.2	85.4	99.2	97.8	98.9	13.0	13.0	1.2	-0.6
50	97.6	93.7	87.7	100.6	99.9	100.6	9.5	10.0	0.9	-0.4
51	96.0	91.7	84.1	98.1	96.4	97.6	12.5	15.0	1.3	-0.6
Avg.	97.0	92.9	85.7	99.3	98.0	99.0	11.7	12.7	1.2	-0.5
Std Dv	0.8	1.0	1.8	1.2	1.8	1.5	1.9	2.5	0.2	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-3.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
43	98.7	95.0	89.2	101.1	101.6	102.6	7.5	9.0	1.0	-0.6
44	99.3	95.6	90.1	102.1	102.6	103.5	6.5	8.0	0.8	-0.5
Avg.	99.0	95.3	89.6	101.6	102.1	103.0	7.0	8.5	0.9	-0.5
Std Dv	0.4	0.4	0.6	0.8	0.7	0.6	0.7	0.7	0.1	0.1
700 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
41	93.5	90.3	82.5	94.5	94.4	95.2	15.5	16.5	0.9	-0.6
42	94.2	90.7	82.1	95.3	94.4	95.4	13.5	18.5	1.0	-0.6
Avg.	93.8	90.5	82.3	94.9	94.4	95.3	14.5	17.5	1.0	-0.6
Std Dv	0.5	0.3	0.3	0.6	0.0	0.2	1.4	1.4	0.1	0.0
1000 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
1	90.9	88.1	79.4	91.9	91.2	92.2	15.5	16.5	1.0	-0.7
2	90.7	87.6	76.9	91.1	88.6	90.2	22.0	22.0	1.6	-0.8
3	91.6	88.6	78.3	92.2	89.7	91.8	20.0	20.5	2.2	-0.6
4	91.7	89.0	79.9	91.4	90.6	92.1	18.5	21.5	1.5	-0.8
5	91.4	88.7	79.8	92.0	90.8	91.8	16.0	19.5	1.0	-0.6
6	91.9	89.2	79.4	91.7	90.7	91.7	20.5	20.5	1.2	-0.7
39	91.8	89.0	78.3	90.9	89.7	90.9	25.0	25.0	1.2	-0.7
40	91.9	88.9	79.8	92.3	91.1	92.3	21.0	22.0	1.4	-0.6
47	91.0	88.2	79.3	92.2	91.0	92.0	19.0	18.5	1.0	-0.8
48	91.4	88.5	79.4	91.6	90.9	92.1	17.0	17.5	1.6	-0.5
Avg.	91.5	88.6	79.1	91.7	90.4	91.7	19.4	20.3	1.4	-0.7
Std Dv	0.4	0.5	1.0	0.5	0.8	0.7	2.9	2.5	0.4	0.1
1500 FT. FLYOVER @ 150 KTS INDICATED AIRSPEED										
37	-	85.7	75.2	88.8	86.1	87.2	25.0	-	1.1	-
38	-	85.6	74.7	89.1	86.5	87.3	22.5	-	1.2	-
45	88.4	85.6	75.8	88.2	86.6	87.8	30.5	30.5	1.2	-0.7
46	89.2	86.2	77.2	90.8	88.5	89.7	18.5	19.5	1.2	-0.5
Avg.	88.8	85.8	75.7	89.2	86.9	88.0	24.1	25.0	1.2	-0.6
Std Dv	0.5	0.3	1.1	1.1	1.1	1.1	5.0	7.8	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.1-1.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE - 164 M. NORTH JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
17	98.7	95.0	87.2	95.9	99.7	101.0	12.0	12.0	1.4	-1.0
18	99.1	95.0	87.0	96.3	99.9	101.1	13.5	13.5	1.2	-1.0
19	99.6	95.6	86.8	96.1	99.8	101.1	14.0	13.5	1.2	-1.0
20	99.3	95.6	87.4	96.0	99.9	100.9	13.0	13.5	1.0	-0.9
21	98.9	95.0	87.1	96.1	99.8	101.0	12.5	13.0	1.3	-1.1
22	99.1	95.4	87.4	96.3	99.9	100.9	12.5	13.0	1.0	-1.0
23	97.9	94.2	87.1	94.5	98.8	99.8	12.0	12.5	1.2	-1.1
24	97.3	93.9	84.7	94.3	97.3	98.6	18.0	16.5	1.5	-0.9
Avs.	98.7	95.0	86.8	95.7	99.4	100.5	13.4	13.4	1.2	-1.0
Std Dv	0.8	0.6	0.9	0.8	0.9	0.9	2.0	1.3	0.2	0.1
TAKEOFF										
8	-	85.5	75.8	87.1	87.8	89.4	20.0	-	1.9	-
9	89.5	85.9	75.5	85.3	87.1	88.8	26.5	25.5	1.7	-0.7
10	89.0	85.2	74.9	85.7	87.1	88.5	22.0	23.0	1.4	-0.7
11	88.6	84.9	74.9	84.9	86.4	88.1	22.0	22.5	1.7	-0.8
12	89.9	85.9	76.2	85.9	87.9	89.5	21.5	22.5	1.6	-0.7
13	89.7	85.6	75.6	85.8	87.7	89.2	20.5	21.0	1.8	-0.9
14	89.3	85.6	75.3	84.6	86.9	88.6	23.0	23.0	1.7	-0.8
15	89.3	85.5	75.8	85.4	87.3	89.0	21.0	21.5	1.7	-0.7
Avs.	89.3	85.5	75.5	85.6	87.3	88.9	22.1	22.7	1.7	-0.8
Std Dv	0.4	0.3	0.4	0.7	0.5	0.5	2.0	1.4	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-2.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE - 164 M. NORTH JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYBY @ 115 KTS INDICATED AIRSPEED										
27	92.9	90.1	82.2	89.9	93.3	94.8	18.0	18.0	1.6	-0.9
30	92.5	89.7	81.9	89.5	92.9	94.1	13.0	13.0	1.2	-0.7
33	93.3	90.5	82.6	91.2	93.6	95.4	14.5	15.5	1.8	-1.0
36	93.4	90.6	82.7	89.3	93.7	94.9	16.0	16.5	1.2	-0.8
Avs.	93.0	90.2	82.3	90.0	93.4	94.8	15.4	15.7	1.5	-0.9
Std Dv	0.4	0.4	0.4	0.9	0.4	0.5	2.1	2.1	0.3	0.1
500 FT. FLYBY @ 132 KTS INDICATED AIRSPEED										
26	93.6	90.8	83.9	92.9	94.6	96.0	11.0	14.5	1.3	-0.9
29	95.6	92.8	85.4	92.9	96.5	97.9	13.0	15.0	1.4	-1.0
32	94.3	91.4	84.1	91.1	95.6	97.3	12.5	13.0	1.7	-0.8
35	94.6	91.7	84.4	92.6	95.4	96.8	12.0	14.0	1.4	-1.0
Avs.	94.5	91.7	84.5	92.4	95.5	97.0	12.1	14.1	1.5	-0.9
Std Dv	0.8	0.8	0.7	0.9	0.8	0.8	0.9	0.9	0.2	0.1
500 FT. FLYBY @ 152 KTS INDICATED AIRSPEED										
25	97.2	93.8	85.7	97.2	97.1	98.3	14.5	16.0	1.5	-0.7
28	97.3	93.6	85.9	98.3	97.2	98.5	16.5	16.5	1.3	-0.5
31	96.9	93.6	85.4	94.8	96.7	98.2	16.0	17.5	2.1	-1.0
34	96.7	93.3	86.1	97.4	97.3	98.5	12.5	16.5	1.2	-0.6
Avs.	97.0	93.6	85.8	96.9	97.1	98.4	14.9	16.6	1.5	-0.7
Std Dv	0.3	0.2	0.3	1.5	0.3	0.1	1.8	0.6	0.4	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-3.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE - 164 M. NORTH JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
43	97.4	93.7	86.9	97.4	98.2	99.5	12.0	12.0	1.6	-0.9
44	98.9	95.2	89.8	99.3	100.9	102.4	8.0	10.5	1.7	-0.8
Avg.	98.1	94.4	88.4	98.4	99.6	101.0	10.0	11.2	1.7	-0.8
Std Dv	1.0	1.1	2.0	1.4	2.0	2.0	2.8	1.1	0.1	0.1
700 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
41	97.6	95.0	87.4	97.9	98.0	99.4	13.0	13.5	1.6	-0.7
42	95.2	92.2	84.6	96.1	95.7	96.3	14.0	17.0	0.6	-0.5
Avg.	96.4	93.6	86.0	97.0	96.8	97.8	13.5	15.2	1.1	-0.6
Std Dv	1.7	2.0	2.0	1.2	1.6	2.2	0.7	2.5	0.7	0.2
1000 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
1	92.9	89.9	80.8	93.8	91.4	92.8	17.0	21.5	1.4	-0.6
2	95.1	92.2	83.0	93.7	93.8	95.1	17.5	18.5	1.2	-0.9
3	93.4	90.2	81.2	93.7	91.9	92.9	18.0	23.0	1.2	-0.5
4	95.6	93.1	83.9	93.7	93.9	95.3	17.5	19.0	1.4	-0.9
5	93.5	90.5	80.5	93.4	91.3	92.8	20.0	24.0	1.5	-0.6
6	96.3	93.7	84.4	94.5	95.5	96.9	17.0	16.5	1.1	-0.9
39	95.5	92.9	84.5	94.6	94.4	95.5	18.0	21.0	1.0	-0.8
40	93.9	90.2	81.1	93.9	92.2	93.4	18.5	27.5	1.4	-0.7
Avg.	94.5	91.6	82.4	93.9	93.1	94.3	17.9	21.4	1.3	-0.7
Std Dv	1.3	1.5	1.7	0.4	1.6	1.6	1.0	3.5	0.2	0.1
1500 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
37	-	90.3	80.5	92.2	90.3	91.2	23.0	-	1.0	-
38	90.6	87.5	76.8	92.4	87.6	88.7	25.5	32.0	1.1	-0.6
45	94.1	91.1	80.9	94.5	91.7	92.8	33.5	35.5	1.2	-0.8
46	91.8	88.7	78.3	92.8	89.3	91.0	25.0	26.0	1.8	-0.6
Avg.	92.2	89.4	79.1	93.0	89.7	90.9	26.7	31.2	1.3	-0.6
Std Dv	1.8	1.6	1.9	1.1	1.7	1.7	4.6	4.8	0.3	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.1-1.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
16	91.7	88.2	79.9	87.5	92.2	92.9	15.0	15.5	0.9	-0.4
17	92.2	88.4	80.5	88.4	93.1	93.9	14.5	14.0	0.9	-0.4
18	92.0	88.2	79.5	86.9	91.9	92.8	16.0	16.5	0.9	-0.5
19	91.7	87.9	79.1	87.1	91.4	92.1	15.5	16.5	0.9	-0.3
20	92.4	88.5	80.5	89.4	93.7	94.4	15.0	14.0	0.8	-0.4
21	92.2	88.3	79.9	87.9	92.4	93.2	15.0	15.5	0.9	-0.4
22	92.6	88.6	80.2	89.1	93.3	94.1	15.5	15.0	1.3	-0.4
23	93.0	89.1	81.7	89.7	94.4	95.4	14.0	13.5	1.1	-0.5
24	93.4	89.5	81.0	89.1	93.6	94.8	14.5	14.5	1.2	-0.3
Avs.	92.4	88.5	80.3	88.3	92.9	93.7	15.0	15.0	1.0	-0.4
Std Dv	0.6	0.5	0.8	1.0	1.0	1.1	0.6	1.1	0.2	0.1
TAKEOFF										
8	89.6	85.0	75.5	86.7	88.7	90.9	16.5	15.5	2.1	-1.0
9	88.4	84.7	74.0	82.8	86.0	88.3	28.5	22.0	2.4	-0.7
10	88.0	84.2	73.6	83.2	86.0	87.6	23.5	20.0	2.4	-0.7
11	87.6	83.9	72.5	81.6	84.9	86.8	36.0	33.0	2.4	-0.7
12	88.1	84.1	73.8	83.0	85.7	87.9	23.0	22.0	2.4	-0.9
13	89.2	84.8	74.5	84.4	86.7	89.2	20.0	19.0	2.6	-1.1
14	88.4	84.2	73.3	82.4	85.4	87.6	23.0	22.5	2.6	-0.9
15	88.5	84.3	73.9	83.6	86.1	88.4	23.0	22.5	2.5	-0.9
Avs.	88.5	84.4	73.9	83.5	86.2	88.3	24.2	22.1	2.4	-0.9
Std Dv	0.7	0.4	0.9	1.5	1.1	1.2	5.8	5.0	0.1	0.1
500 FT. FLYBY @ 100 KTS INDICATED AIRSPEED										
52	90.7	87.9	80.8	87.1	91.7	92.9	11.0	12.5	1.2	-0.9
Avs.	90.7	87.9	80.8	87.1	91.7	92.9	11.0	12.5	1.2	-0.9
Std Dv	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-2.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYBY @ 115 KTS INDICATED AIRSPEED										
27	93.1	90.5	81.4	88.3	92.6	93.2	17.0	20.0	0.6	-0.6
30	93.0	90.7	83.8	89.9	94.6	95.7	12.0	12.0	1.1	-0.8
33	93.6	90.9	82.0	88.6	93.2	94.0	16.5	18.0	0.9	-0.8
36	91.7	89.5	81.6	88.5	92.4	93.4	17.0	17.0	1.1	-0.9
Avs.	92.9	90.4	82.2	88.8	93.2	94.1	15.6	16.7	0.9	-0.8
Std Dv	0.8	0.7	1.1	0.7	1.0	1.1	2.4	3.4	0.2	0.1
500 FT. FLYBY @ 132 KTS INDICATED AIRSPEED										
26	95.2	93.0	85.9	94.4	96.4	97.5	9.5	10.0	1.1	-0.9
29	94.5	92.1	84.0	90.6	94.9	95.9	15.5	17.0	1.0	-0.7
32	95.6	93.1	86.4	93.7	97.0	98.0	10.0	11.0	1.0	-0.9
35	93.9	91.5	83.6	90.1	94.5	95.1	14.0	14.5	0.6	-0.7
Avs.	94.8	92.4	85.0	92.2	95.7	96.6	12.2	13.1	0.9	-0.8
Std Dv	0.8	0.8	1.4	2.1	1.2	1.4	3.0	3.2	0.2	0.1
500 FT. FLYBY @ 152 KTS INDICATED AIRSPEED										
25	96.2	93.4	85.2	95.2	96.0	97.0	18.0	19.0	1.1	-0.6
28	97.2	94.2	87.0	97.0	98.1	99.5	11.0	11.5	1.4	-0.9
31	96.1	93.5	86.3	94.8	97.4	98.4	10.0	13.5	1.0	-0.6
34	96.9	94.2	85.9	95.3	97.1	98.8	13.5	13.5	1.9	-0.9
Avs.	96.6	93.8	86.1	95.6	97.2	98.4	13.1	14.4	1.3	-0.7
Std Dv	0.5	0.4	0.8	1.0	0.9	1.1	3.6	3.2	0.4	0.2
500 FT. FLYBY @ 165 KTS INDICATED AIRSPEED										
49	96.8	93.6	86.7	97.1	97.7	98.5	10.5	15.5	0.9	-0.6
50	97.6	94.3	88.2	97.9	99.4	100.6	9.0	10.5	1.3	-0.6
51	95.9	92.8	85.3	96.2	96.4	97.2	11.0	17.5	0.8	-0.4
Avs.	96.8	93.6	86.7	97.1	97.8	98.7	10.2	14.5	1.0	-0.6
Std Dv	0.8	0.8	1.4	0.8	1.5	1.7	1.0	3.6	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.1-3.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
43	97.9	94.9	89.2	96.0	100.6	102.5	7.5	9.0	1.9	-0.9
44	96.9	93.4	86.9	95.3	98.2	100.1	9.5	9.5	1.9	-0.9
Avs.	97.4	94.2	88.1	95.7	99.4	101.3	8.5	9.2	1.9	-0.9
Std Dv	0.7	1.0	1.6	0.5	1.7	1.7	1.4	0.4	0.0	0.0
700 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
41	93.9	91.3	83.5	92.7	94.4	95.7	13.0	15.0	1.3	-0.7
42	96.6	93.7	86.4	95.1	96.7	98.2	12.5	13.0	1.5	-0.8
Avs.	95.2	92.5	84.9	93.9	95.6	97.0	12.7	14.0	1.4	-0.7
Std Dv	2.0	1.7	2.0	1.7	1.6	1.8	0.4	1.4	0.2	0.1
1000 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
1	94.6	91.6	83.5	93.8	94.7	95.9	14.0	16.0	1.2	-0.8
2	90.7	88.1	77.9	90.8	89.7	91.1	21.0	19.5	1.4	-0.6
3	94.7	92.1	83.6	92.9	93.9	95.0	17.0	19.5	1.1	-0.8
4	91.4	89.0	79.6	90.1	91.0	91.4	17.5	22.5	1.2	-0.6
5	94.2	91.3	82.3	93.2	93.2	94.7	17.0	17.5	1.6	-0.9
6	91.6	89.3	79.9	90.8	91.1	92.1	17.0	19.0	1.2	-0.4
39	92.4	90.0	80.3	90.9	91.2	92.1	20.0	22.5	1.2	-0.4
40	95.4	93.0	83.9	94.0	94.9	96.1	16.5	16.5	1.1	-1.0
47	91.1	88.4	79.3	90.9	90.5	91.1	18.5	26.0	0.6	-0.5
48	9[illegible].4	91.8	82.8	93.2	93.3	94.7	17.0	17.5	1.4	-0.8
Avs.	93.1	90.5	81.3	92.1	92.4	93.4	17.5	19.6	1.2	-0.7
Std Dv	1.8	1.7	2.1	1.5	1.9	2.0	1.9	3.2	0.2	0.2
1500 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
37	-	87.3	76.4	88.4	87.3	88.4	25.5	-	1.1	-
38	91.6	89.0	79.0	90.2	90.6	91.7	22.0	21.5	1.4	-0.7
45	89.0	86.8	76.6	88.4	87.1	88.3	25.5	30.5	1.2	-0.7
46	93.7	90.7	80.4	91.5	92.0	93.1	20.5	31.0	1.1	-0.6
Avs.	91.4	88.5	78.1	89.6	89.2	90.4	23.4	27.7	1.2	-0.7
Std Dv	2.3	1.7	1.9	1.5	2.5	2.4	2.5	5.3	0.1	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.1-1.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
16	95.1	91.9	83.8	92.0	95.6	97.0	14.0	15.5	1.4	0.1
17	95.8	92.3	84.4	93.2	96.4	97.9	14.0	15.0	1.5	-0.1
18	96.0	92.4	84.1	92.1	96.1	97.7	16.0	16.0	1.8	-0.2
19	95.7	92.2	83.6	91.7	95.5	97.0	15.5	16.5	1.5	0.0
20	96.1	92.7	84.4	93.2	96.6	97.6	14.5	15.0	1.3	0.1
21	95.8	92.3	84.3	92.9	96.4	97.9	14.5	15.0	1.5	0.0
22	95.9	92.5	84.7	92.4	96.6	97.8	14.5	15.0	1.3	0.1
23	97.2	92.7	85.6	93.7	98.8	100.3	12.5	12.5	1.5	-0.1
24	97.5	93.4	85.4	93.9	98.7	99.8	14.0	14.0	1.1	0.1
Avs.	96.1	92.5	84.5	92.8	96.7	98.1	14.4	14.9	1.4	0.1
Std Dv	0.7	0.4	0.7	0.8	1.2	1.2	1.0	1.2	0.2	0.2
TAKEOFF										
8	96.0	91.8	82.5	91.8	94.9	97.4	15.5	14.5	2.5	-0.9
9	91.8	87.7	77.9	88.2	90.6	93.2	18.0	16.0	2.6	-0.7
10	91.7	87.5	77.4	87.9	89.9	92.5	18.0	17.5	2.5	-0.7
11	90.9	87.0	76.4	86.7	88.9	91.4	20.0	18.5	2.5	-0.7
12	91.8	87.6	77.4	88.3	90.7	93.2	19.5	17.0	2.5	-0.7
13	92.5	88.1	78.1	88.9	91.0	93.7	18.5	16.0	2.6	-0.9
14	91.4	87.6	77.4	87.0	89.4	91.9	21.0	19.0	2.5	-0.7
15	91.7	87.6	77.8	88.1	90.4	93.0	19.0	18.0	2.6	-0.8
Avs.	92.2	88.1	78.1	88.4	90.7	93.3	18.7	17.1	2.5	-0.8
Std Dv	1.6	1.5	1.8	1.6	1.8	1.8	1.6	1.5	0.1	0.1
500 FT. FLYBY @ 100 KTS INDICATED AIRSPEED										
52	95.4	92.6	85.3	90.8	96.5	97.9	11.0	11.5	1.5	-0.6
Avs.	95.4	92.6	85.3	90.8	96.5	97.9	11.0	11.5	1.5	-0.6
Std Dv	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.1-2.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYBY @ 115 KTS INDICATED AIRSPEED										
27	97.3	94.7	86.3	90.9	97.4	98.2	14.0	15.0	1.0	-0.4
30	97.4	94.8	88.1	93.3	98.8	100.3	10.5	11.5	1.5	-0.7
33	97.6	95.2	87.3	91.1	97.9	98.9	13.5	15.5	1.0	-0.4
36	95.7	93.4	86.3	91.4	96.4	97.5	11.0	11.5	1.4	-0.6
Avg.	97.0	94.5	87.0	91.7	97.6	98.7	12.2	13.4	1.2	-0.6
Std Dv	0.9	0.8	0.9	1.1	1.0	1.2	1.8	2.2	0.3	0.2
500 FT. FLYBY @ 132 KTS INDICATED AIRSPEED										
26	99.0	96.5	89.7	96.0	100.5	101.8	10.0	9.5	1.5	-0.8
29	98.7	96.5	88.9	92.6	99.6	100.3	12.5	14.0	0.9	-0.3
32	99.2	96.7	90.5	95.9	101.2	102.7	10.0	9.5	1.4	-0.7
35	98.4	96.1	88.6	92.2	99.7	100.3	12.5	13.5	0.6	-0.3
Avg.	98.8	96.5	89.4	94.2	100.2	101.3	11.2	11.6	1.1	-0.6
Std Dv	0.4	0.3	0.9	2.1	0.8	1.2	1.4	2.5	0.4	0.3
500 FT. FLYBY @ 152 KTS INDICATED AIRSPEED										
25	99.5	97.1	89.9	96.0	100.9	101.7	11.0	13.0	1.0	0.0
28	100.9	98.0	91.5	99.8	102.3	103.5	10.5	11.0	1.3	-0.6
31	100.4	98.1	91.3	96.6	102.5	103.1	9.0	12.0	0.6	-0.2
34	100.2	97.4	89.9	98.2	101.4	103.0	11.5	11.0	1.6	-0.6
Avg.	100.3	97.7	90.7	97.6	101.8	102.8	10.5	11.7	1.1	-0.4
Std Dv	0.6	0.5	0.8	1.7	0.8	0.8	1.1	1.0	0.4	0.3
500 FT. FLYBY @ 165 KTS INDICATED AIRSPEED										
49	100.9	98.2	91.8	98.9	102.7	103.4	9.0	12.0	0.7	-0.4
50	101.6	98.5	92.7	101.1	103.5	104.7	9.0	10.0	1.3	-0.5
51	100.1	97.5	90.2	97.6	101.3	102.2	10.0	12.5	0.9	-0.3
Avg.	100.9	98.1	91.6	99.2	102.5	103.4	9.3	11.5	1.0	-0.4
Std Dv	0.7	0.5	1.2	1.8	1.2	1.3	0.6	1.3	0.3	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-3.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
43	94.9	91.9	86.8	92.2	97.9	99.0	6.5	9.0	1.1	-0.6
44	95.5	92.2	86.4	93.5	97.5	99.1	9.0	9.0	1.6	-0.6
Avg.	95.2	92.1	86.6	92.8	97.7	99.1	7.7	9.0	1.4	-0.6
Std Dv	0.4	0.2	0.2	0.9	0.3	0.0	1.8	0.0	0.3	0.0
700 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
41	98.2	96.1	88.6	94.5	99.5	100.0	12.0	13.5	0.7	-0.1
42	100.2	97.7	91.1	97.9	101.2	102.5	12.5	13.0	1.3	-0.5
Avg.	99.2	96.9	89.9	96.2	100.4	101.3	12.2	13.2	1.0	-0.3
Std Dv	1.4	1.1	1.8	2.4	1.3	1.8	0.4	0.4	0.4	0.3
1000 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
1	97.0	94.5	87.1	95.7	97.1	98.4	13.0	15.5	1.3	-0.3
2	93.9	91.7	82.3	92.6	93.2	94.3	17.5	19.5	1.1	0.1
3	97.5	95.4	87.5	95.7	97.2	98.7	15.5	17.0	1.5	-0.4
4	97.6	96.3	86.6	92.9	96.7	97.6	16.5	18.5	1.3	-0.4
5	99.0	96.8	89.4	96.1	99.1	100.7	14.0	15.5	1.6	-0.6
6	98.0	96.6	87.5	93.6	97.2	98.3	14.0	18.0	1.2	-0.2
39	96.6	94.6	85.3	93.0	96.1	97.2	17.5	19.5	1.1	0.1
40	98.9	96.6	87.6	96.6	97.8	98.9	16.5	18.0	1.4	-0.6
47	95.0	93.0	83.7	92.7	94.7	95.3	17.5	19.0	0.6	-0.1
48	97.8	95.3	87.8	96.0	97.7	99.0	14.5	16.5	1.4	-0.5
Avg.	97.1	95.1	86.5	94.5	96.7	97.8	15.6	17.7	1.3	-0.3
Std Dv	1.6	1.7	2.1	1.7	1.7	1.9	1.7	1.5	0.3	0.2
1500 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
37	93.4	91.8	81.2	90.3	92.0	92.7	24.5	25.5	0.6	-0.1
38	95.2	92.8	82.8	92.7	93.7	94.4	21.5	23.0	0.7	-0.7
45	93.4	91.3	81.7	91.0	92.6	93.2	17.5	30.0	0.6	-0.1
46	98.9	97.2	88.6	94.7	98.1	99.6	18.5	19.5	1.5	-0.6
Avg.	95.2	93.3	83.6	92.2	94.1	95.0	20.5	24.5	0.9	-0.4
Std Dv	2.6	2.7	3.4	2.0	2.8	3.2	3.2	4.4	0.4	0.3

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

DOT/TSC
9/11/80

TABLE NO. A.1-1.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
16	91.0	88.4	78.5	87.4	90.4	90.9	20.0	20.5	0.6	-0.5
17	91.7	88.8	80.3	88.2	91.9	93.2	19.5	19.5	1.5	-0.8
18	91.2	88.1	78.4	87.9	90.2	91.2	21.5	21.0	1.0	-0.6
19	92.3	89.6	80.4	88.8	91.8	92.4	18.5	19.5	0.6	-0.4
20	93.0	90.4	81.5	88.9	92.6	94.1	17.0	17.5	1.5	-0.6
21	91.7	89.0	81.0	88.9	92.2	93.4	17.5	17.5	1.2	-0.7
22	93.8	91.3	83.0	90.6	94.1	94.9	18.0	19.5	0.8	-0.5
23	92.1	89.1	81.1	89.4	92.6	93.9	16.0	16.5	1.3	-0.8
24	92.7	89.7	78.4	88.2	90.4	92.4	29.5	27.5	2.1	-0.7
Avg.	92.2	89.4	80.3	88.7	91.8	93.0	19.7	19.9	1.2	-0.6
Std Dv	0.9	1.0	1.6	0.9	1.3	1.3	4.0	3.2	0.5	0.1
TAKEOFF										
8	86.3	83.1	72.4	85.2	83.6	85.2	23.0	24.0	1.8	-0.9
9	86.5	83.7	72.2	83.5	83.4	85.0	31.5	31.0	1.9	-0.7
10	86.0	82.9	71.7	83.8	83.1	84.6	25.5	26.0	1.9	-0.8
11	85.9	83.1	72.4	82.3	83.3	85.1	25.0	26.0	1.8	-0.8
12	87.2	84.0	73.3	83.8	85.0	86.1	24.0	25.0	1.8	-0.6
13	-	82.0	70.9	82.4	82.9	84.0	23.0	-	1.1	-
14	84.7	81.8	70.4	81.4	81.6	83.6	25.5	26.0	2.0	-0.8
15	84.9	81.8	71.1	82.4	81.9	83.4	24.5	26.0	1.6	-0.8
Avg.	85.9	82.8	71.8	83.1	83.1	84.6	25.2	26.2	1.7	-0.8
Std Dv	0.9	0.9	1.0	1.2	1.0	0.9	2.7	2.2	0.3	0.1
500 FT. FLYBY @ 100 KTS INDICATED AIRSPEED										
52	87.8	85.5	76.4	83.7	86.5	87.8	23.0	28.5	1.4	-1.0
Avg.	87.8	85.5	76.4	83.7	86.5	87.8	23.0	28.5	1.4	-1.0
Std Dv	-	-	-	-	-	-	-	-	-	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.1-2.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYBY @ 115 KTS INDICATED AIRSPEED										
27	90.1	87.4	77.7	85.0	88.1	90.0	31.0	31.0	1.8	-0.6
30	91.1	88.8	79.1	86.3	90.0	91.9	25.0	21.0	1.9	-0.5
33	90.8	88.2	78.6	86.5	89.0	90.5	20.0	23.0	1.5	-0.6
36	91.5	89.1	80.6	86.9	91.4	93.1	20.0	19.5	1.7	-0.9
Avg.	90.9	88.4	79.0	86.2	89.6	91.4	24.0	23.6	1.7	-0.7
Std Dv	0.6	0.7	1.2	0.8	1.4	1.4	5.2	5.1	0.2	0.1
500 FT. FLYBY @ 132 KTS INDICATED AIRSPEED										
26	92.8	90.2	81.8	88.7	92.2	93.6	14.0	21.5	1.5	-0.8
29	93.4	90.4	80.1	90.0	91.5	93.2	20.5	24.5	1.8	-0.8
32	92.3	89.4	80.8	88.7	91.5	93.2	20.0	27.5	1.8	-0.8
35	-	89.6	79.8	89.0	90.5	92.2	20.0	-	1.8	-
Avg.	92.8	89.9	80.6	89.1	91.4	93.1	18.6	25.2	1.7	-0.8
Std Dv	0.6	0.5	0.9	0.6	0.7	0.6	3.1	4.0	0.1	0.0
500 FT. FLYBY @ 152 KTS INDICATED AIRSPEED										
25	95.5	91.8	81.3	93.9	93.4	94.8	22.0	21.5	1.4	-0.7
28	94.9	91.9	84.4	94.5	95.1	97.4	14.5	15.0	2.3	-0.6
31	94.2	91.3	81.3	91.2	92.6	94.7	22.5	21.5	2.1	-0.7
34	94.9	92.5	84.2	93.6	94.9	97.1	21.0	16.0	2.2	-0.5
Avg.	94.9	91.9	82.8	93.3	94.0	96.0	20.0	18.5	2.0	-0.6
Std Dv	0.5	0.5	1.8	1.5	1.2	1.4	3.7	3.5	0.4	0.1
500 FT. FLYBY @ 165 KTS INDICATED AIRSPEED										
49	-	90.7	82.3	94.5	93.1	95.0	18.0	-	1.9	-
50	94.6	91.6	84.3	93.7	94.5	95.9	12.5	15.5	1.4	-0.5
51	94.2	90.0	81.1	94.1	93.1	94.8	22.0	21.5	1.7	-0.6
Avg.	94.4	90.8	82.6	94.1	93.6	95.2	17.5	18.5	1.7	-0.6
Std Dv	0.3	0.8	1.6	0.4	0.8	0.6	4.8	4.2	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.1-3.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
9/11/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 22,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
43	94.3	90.4	82.8	93.7	93.8	94.8	16.5	17.0	1.0	-0.4
44	95.0	92.5	84.6	92.8	95.6	97.4	15.0	14.0	1.8	-0.4
Avs.	94.6	91.5	83.7	93.3	94.7	96.1	15.7	15.5	1.4	-0.4
Std Dv	0.5	1.5	1.3	0.7	1.3	1.8	1.1	2.1	0.6	0.0
700 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
41	94.2	90.9	82.2	93.0	93.6	95.3	19.0	18.5	1.7	-0.9
42	92.9	90.4	82.6	91.8	93.1	94.0	15.0	17.5	1.0	-0.7
Avs.	93.6	90.6	82.4	92.4	93.3	94.7	17.0	18.0	1.4	-0.8
Std Dv	0.9	0.3	0.3	0.8	0.4	0.9	2.8	0.7	0.5	0.1
1000 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
1	90.8	88.0	78.3	90.4	89.6	90.6	18.5	23.0	0.9	-0.8
2	91.8	88.7	77.8	90.6	89.4	91.1	24.0	23.0	2.0	-0.9
3	91.4	88.6	78.6	91.6	89.7	90.6	21.0	24.0	0.9	-0.7
4	92.7	90.1	79.5	90.3	90.1	91.3	23.0	23.5	1.2	-0.9
5	91.2	88.7	79.0	91.1	89.8	90.8	21.5	23.5	1.1	-0.9
6	92.8	90.0	79.3	90.8	90.7	92.3	22.0	22.5	1.6	-0.9
39	93.3	90.7	80.5	92.0	91.2	92.3	23.5	26.5	1.1	-0.7
40	90.9	88.3	78.9	89.8	90.0	90.9	21.0	23.5	0.9	-0.7
47	91.6	88.6	78.8	90.3	90.0	91.9	26.5	25.0	2.0	-0.8
48	89.9	87.1	77.5	89.7	88.7	89.8	18.0	24.0	1.1	-0.6
Avs.	91.7	88.9	78.8	90.7	89.9	91.2	21.9	23.8	1.3	-0.8
Std Dv	1.1	1.1	0.9	0.7	0.7	0.8	2.5	1.2	0.4	0.1
1500 FT. FLYBY @ 150 KTS INDICATED AIRSPEED										
37	92.4	90.0	79.0	91.1	89.9	91.0	29.0	29.5	1.2	-1.0
38	-	86.6	76.2	89.6	86.4	87.8	27.5	-	1.4	-
45	92.5	90.3	79.9	90.1	89.9	91.2	31.5	33.0	1.3	-0.9
46	-	87.2	77.7	90.0	87.7	88.4	22.0	-	1.6	-
Avs.	92.5	88.5	78.2	90.2	88.5	89.6	27.5	31.3	1.4	-1.0
Std Dv	0.1	1.9	1.6	0.6	1.7	1.7	4.0	2.5	0.2	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.2-1.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/26/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
34	93.7	90.7	81.2	91.2	94.3	95.5	24.5	15.0	1.3	-0.7
36	95.3	91.8	85.4	93.9	97.9	98.9	10.5	10.0	0.8	-0.9
40	96.4	93.1	86.3	93.5	97.6	99.1	15.5	16.0	1.7	-1.1
42	95.8	92.6	85.4	93.2	97.0	98.0	14.5	15.0	1.0	-0.9
44	94.4	91.5	84.4	92.5	96.4	96.9	16.0	16.5	0.5	-0.8
54	95.2	91.9	86.8	93.6	98.6	99.8	10.0	12.5	1.2	-1.1
56	96.1	93.1	86.8	93.8	98.6	99.9	10.5	11.0	1.4	-0.7
Avg.	95.3	92.1	85.2	93.1	97.2	98.3	14.5	13.7	1.1	-0.9
Std Dv	0.9	0.9	2.0	0.9	1.5	1.6	5.1	2.5	0.4	0.2
TAKEOFF										
33	88.1	84.6	75.3	79.6	86.7	88.6	18.0	17.5	2.0	-1.6
35	87.9	84.7	76.6	80.1	87.8	89.6	13.5	13.5	2.2	-1.4
37	87.9	84.6	76.0	80.5	87.5	89.7	14.5	13.5	2.2	-1.4
39	-	85.0	76.9	80.2	88.2	89.9	13.0	-	1.7	-
41	88.0	85.0	76.9	80.8	88.3	90.2	14.0	13.5	1.9	-1.4
43	88.0	84.8	76.5	80.4	88.0	89.9	13.5	12.5	2.3	-1.4
53	86.7	83.8	75.3	78.0	86.3	88.1	15.0	14.5	2.3	-1.4
55	85.6	82.7	73.9	77.3	84.7	86.3	16.5	16.5	1.6	-1.3
Avg.	87.5	84.4	75.9	79.6	87.2	89.0	14.7	12.7	2.0	-1.4
Std Dv	0.9	0.8	1.0	1.3	1.2	1.3	1.7	5.4	0.3	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-2.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/26/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 23,1980

500 FT. FLYOVER - TARGET AIRSPEED 93 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
21	87.6	85.1	76.0	81.8	87.9	89.0	19.0	17.0	1.1	-0.9
22	89.8	87.3	81.9	88.4	93.4	94.0	9.0	8.5	0.6	-0.9
23	87.8	85.1	76.1	83.0	88.0	89.1	16.0	14.5	1.1	-0.8
24	89.9	87.0	80.9	88.1	92.3	93.1	10.5	11.0	2.2	-1.0
Avs.	88.8	86.1	78.7	85.3	90.4	91.3	13.6	12.7	1.3	-0.9
Std Dv	1.2	1.2	3.1	3.5	2.9	2.6	4.7	3.8	0.7	0.1

500 FT. FLYOVER - TARGET AIRSPEED 109 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
29	86.9	84.4	76.1	80.8	88.2	89.2	15.0	13.5	1.1	-0.9
30	85.2	82.7	75.4	81.3	87.2	88.5	10.5	9.5	1.3	-0.9
31	85.9	83.4	75.4	80.2	87.1	88.2	14.5	14.0	1.1	-0.9
32	84.3	81.5	74.3	79.5	86.1	87.4	13.0	12.0	1.3	-1.0
Avs.	85.6	83.0	75.3	80.5	87.2	88.4	13.2	12.2	1.2	-0.9
Std Dv	1.1	1.2	0.8	0.8	0.8	0.8	2.0	2.0	0.1	0.1

500 FT. FLYOVER - TARGET AIRSPEED 124 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
49	87.0	84.4	78.6	87.2	90.1	91.2	8.5	8.5	1.2	-0.9
50	87.5	84.9	77.7	84.9	89.4	90.8	12.0	11.0	1.3	-0.9
51	86.0	83.3	76.2	84.9	87.2	88.9	12.5	12.0	1.7	-1.1
52	86.2	83.7	76.8	85.5	88.0	89.3	10.5	10.0	1.2	-0.9
Avs.	86.7	84.1	77.3	85.6	88.7	90.0	10.9	10.4	1.4	-0.9
Std Dv	0.7	0.7	1.0	1.1	1.3	1.1	1.8	1.5	0.2	0.1

500 FT. FLYOVER - TARGET AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
17	89.5	86.7	79.7	90.8	91.4	92.0	11.5	12.0	0.7	-0.8
18	88.1	85.4	80.8	93.6	92.6	93.8	6.5	6.0	1.3	-0.7
19	88.7	86.2	79.1	90.6	89.9	91.0	11.0	12.5	1.2	-1.0
20	86.9	84.3	79.1	92.4	90.4	91.6	7.0	7.0	1.2	-0.7
Avs.	88.3	85.7	79.7	91.9	91.0	92.1	9.0	9.4	1.1	-0.8
Std Dv	1.1	1.0	0.8	1.4	1.2	1.2	2.6	3.4	0.3	0.1

500 FT. FLYOVER - TARGET AIRSPEED 155 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
25	89.3	86.7	79.9	94.6	92.1	92.9	9.5	9.5	0.8	-0.6
26	90.0	86.9	80.4	98.9	93.1	94.1	8.0	8.0	0.9	-0.8
27	92.3	89.1	83.8	98.9	96.6	97.0	7.5	7.5	0.4	-0.4
28	91.2	88.3	82.8	100.2	95.1	95.8	6.5	6.5	0.8	-0.5
Avs.	90.7	87.8	81.7	98.2	94.2	94.9	7.9	7.9	0.7	-0.6
Std Dv	1.3	1.1	1.9	2.5	2.0	1.8	1.2	1.2	0.2	0.2

TABLE NO. A.2-4.1

SIKORSKY S-76 SPIRIT HELICOPTER

001/150

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 23,1980

300 FT. FLYOVER - TARGET AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
9	91.4	88.6	83.0	94.2	94.8	95.9	7.5	7.5	1.3	-0.7
10	90.3	87.5	83.5	95.9	95.5	96.3	5.5	5.0	1.0	-0.6
15	91.3	88.3	83.8	94.8	95.6	96.8	6.5	6.0	1.2	-1.0
16	91.3	88.3	84.6	95.3	96.7	97.8	5.0	4.5	1.1	-0.6
Avs.	91.1	88.2	83.7	95.0	95.6	96.7	6.1	5.7	1.1	-0.7
Std Dv	0.5	0.5	0.7	0.7	0.8	0.8	1.1	1.3	0.1	0.2

700 FT. FLYOVER - TARGET AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
7	86.3	84.1	75.0	87.9	85.6	86.8	20.0	20.5	1.1	-0.9
8	86.9	85.1	77.9	90.3	88.7	90.2	10.0	9.5	1.6	-0.9
13	86.3	84.3	76.4	87.9	86.8	88.1	14.0	14.5	1.2	-0.8
14	86.9	84.8	78.7	90.6	89.4	90.8	9.0	9.0	1.4	-0.7
Avs.	86.6	84.6	77.0	89.2	87.6	89.0	13.2	13.4	1.3	-0.8
Std Dv	0.4	0.4	1.6	1.5	1.7	1.9	5.0	5.4	0.2	0.1

1000 FT. FLYOVER - TARGET AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
45	82.8	81.1	72.8	88.4	83.3	84.6	13.5	14.0	1.3	-0.8
46	83.2	81.3	72.5	87.5	82.9	84.2	19.0	22.0	1.3	-0.9
47	83.1	81.4	73.5	88.2	83.5	84.8	13.5	14.0	1.0	-0.7
48	84.3	82.5	74.1	87.6	84.4	85.5	16.0	18.5	1.1	-0.8
1	85.4	83.5	74.2	86.9	85.0	86.0	20.5	21.0	1.0	-0.8
2	84.2	82.3	74.0	90.4	85.1	86.5	13.5	13.0	1.4	-0.6
3	85.0	83.0	74.0	86.6	84.4	85.6	23.0	23.5	1.5	-0.7
4	83.9	82.0	74.3	88.9	84.6	85.8	14.0	14.5	1.2	-0.7
Avs.	84.0	82.1	73.7	88.1	84.2	85.4	16.6	17.6	1.2	-0.8
Std Dv	0.9	0.8	0.7	1.2	0.8	0.8	3.7	4.2	0.2	0.1

1500 FT. FLYOVER - TARGET AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
5	81.5	80.2	69.0	85.3	79.2	80.3	33.5	33.0	1.2	-0.6
6	80.8	79.6	71.8	85.7	81.4	82.9	17.0	17.0	1.5	-0.7
11	81.2	79.6	69.8	84.7	80.4	81.1	22.5	27.5	0.7	-0.9
12	80.6	79.0	68.9	85.6	79.5	80.9	19.5	18.0	1.4	-0.8
Avs.	81.0	79.6	69.9	85.3	80.1	81.3	23.1	23.9	1.2	-0.8
Std Dv	0.4	0.5	1.4	0.5	1.0	1.1	7.3	7.7	0.3	0.1

TABLE NO. A.2-4.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/26/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
69	96.3	93.1	85.4	93.8	97.5	98.6	14.0	14.0	1.2	-0.8
70	95.7	92.8	84.4	92.2	96.6	97.2	14.0	14.0	0.7	-0.7
Avs.	96.0	93.0	84.9	93.0	97.0	97.9	14.0	14.0	0.9	-0.7
Std Dv	0.4	0.2	0.7	1.1	0.6	1.0	0.0	0.0	0.4	0.1
500 FT. FLYOVER - TARGET AIRSPEED 93 KTS										
61	88.0	85.4	78.0	84.0	89.9	91.4	15.0	12.0	1.6	-0.8
62	90.0	87.1	79.4	84.4	91.2	92.5	12.5	12.0	1.3	-0.9
63	88.4	85.4	77.6	83.8	89.7	91.3	12.0	11.5	1.6	-0.9
64	89.4	86.9	78.8	86.0	90.6	91.9	21.0	14.5	1.3	-0.7
Avs.	89.0	86.2	78.5	84.6	90.3	91.8	15.1	12.5	1.4	-0.8
Std Dv	0.9	0.9	0.8	1.0	0.7	0.5	4.1	1.4	0.2	0.1
500 FT. FLYOVER - TARGET AIRSPEED 140 KTS										
57	89.6	87.0	81.8	92.7	92.8	94.4	7.5	7.5	1.6	-0.9
58	91.9	89.3	83.0	92.6	94.4	96.1	9.0	8.5	1.7	-1.1
59	91.2	88.6	83.6	93.4	94.5	96.1	6.5	6.5	1.6	-1.0
60	91.0	88.6	82.6	92.5	93.2	94.7	9.0	9.5	1.5	-1.1
Avs.	90.9	88.4	82.8	92.8	93.7	95.3	8.0	8.0	1.6	-1.0
Std Dv	1.0	1.0	0.7	0.4	0.9	0.9	1.2	1.3	0.1	0.1
500 FT. FLYOVER - TARGET AIRSPEED 155 KTS										
65	-	84.4	81.3	95.1	93.0	94.3	4.0	-	1.4	-
66	93.1	89.5	83.7	97.8	96.1	97.3	9.5	10.0	1.2	-0.7
67	91.7	88.5	83.3	97.6	95.1	96.0	6.5	8.5	0.9	-0.7
68	91.8	88.5	82.8	97.5	94.7	96.1	8.0	8.5	1.4	-0.7
Avs.	92.2	87.7	82.8	97.0	94.7	95.9	7.0	6.7	1.2	-0.7
Std Dv	0.8	2.3	1.1	1.3	1.3	1.2	2.3	4.6	0.2	0.0

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.2-1.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE-CENTER (FLUSH) JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
34	96.6	93.6	85.1	93.9	97.2	98.2	15.5	15.0	1.0	-0.4
36	98.5	95.5	88.6	96.6	100.5	101.7	11.5	11.0	1.1	-0.6
40	99.0	96.4	89.2	96.5	100.2	101.5	14.0	14.5	1.2	-0.6
42	98.7	96.1	88.8	95.9	99.7	100.7	14.0	14.0	1.0	-0.4
44	97.5	94.9	88.4	96.1	99.8	100.4	11.5	12.5	0.6	-0.3
54	99.6	97.3	90.9	97.1	102.4	102.7	14.0	15.0	0.4	-0.4
56	98.7	96.6	90.4	97.0	101.3	101.7	10.0	11.5	0.4	-0.2
Avg.	98.4	95.8	88.8	96.1	100.2	101.0	12.9	13.4	0.8	-0.4
Std Dv	1.0	1.2	1.9	1.1	1.6	1.4	1.9	1.7	0.4	0.2
TAKEOFF										
33	91.3	88.2	78.5	84.3	89.7	91.7	17.5	18.0	2.0	-1.3
35	91.1	88.4	80.2	85.0	91.0	92.3	14.0	15.0	1.3	-1.0
37	91.1	88.2	79.5	84.9	90.4	92.3	14.0	14.5	1.9	-1.2
39	-	88.8	80.4	84.6	91.2	93.1	13.5	-	1.9	-
41	91.2	88.6	80.6	84.9	91.3	93.4	14.0	14.5	2.1	-1.2
43	91.2	88.5	80.5	84.7	91.0	92.9	13.5	15.0	1.9	-1.1
53	90.0	87.5	79.0	82.7	89.4	91.1	14.5	15.5	1.7	-0.9
55	89.2	86.7	77.8	82.0	88.0	89.9	16.5	17.0	1.9	-1.0
Avg.	90.7	88.1	79.6	84.1	90.2	92.1	14.7	13.7	1.8	-1.1
Std Dv	0.8	0.7	1.1	1.1	1.2	1.2	1.5	5.7	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-2.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE-CENTER (FLUSH) JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
21	91.5	89.2	79.7	86.4	91.6	92.4	19.0	18.0	0.8	-0.2
22	92.9	90.3	84.9	90.5	96.4	97.0	9.0	9.5	0.6	-0.5
23	91.4	88.9	79.9	85.8	91.9	92.8	17.0	15.5	0.9	-0.4
24	93.4	90.7	84.7	91.2	96.0	97.3	11.0	10.5	1.2	-0.6
Avs.	92.3	89.8	82.3	88.4	94.0	94.9	14.0	13.4	0.9	-0.4
Std Dv	1.0	0.9	2.9	2.8	2.6	2.6	4.8	4.0	0.3	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
29	90.7	88.0	79.9	84.6	91.7	92.9	14.0	13.0	1.1	-0.4
30	89.3	86.8	79.7	85.0	91.4	92.9	10.0	9.5	1.4	-0.7
31	89.8	87.2	79.1	83.9	90.7	91.8	14.5	13.5	1.1	-0.6
32	88.0	85.5	78.4	83.4	90.1	91.6	11.5	10.0	1.4	-0.4
Avs.	89.4	86.9	79.3	84.2	91.0	92.3	12.5	11.5	1.3	-0.5
Std Dv	1.1	1.1	0.7	0.7	0.7	0.7	2.1	2.0	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
49	90.4	88.0	82.3	89.4	93.7	94.8	8.5	8.5	1.1	-0.6
50	91.0	88.5	81.9	88.3	93.0	94.3	11.0	11.0	1.3	-0.8
51	89.6	87.2	80.9	87.4	91.5	92.9	10.5	11.5	1.4	-0.8
52	89.6	87.2	80.1	87.7	91.3	92.6	11.0	11.0	1.2	-0.6
Avs.	90.1	87.7	81.3	88.2	92.4	93.6	10.2	10.5	1.3	-0.7
Std Dv	0.7	0.7	1.0	0.9	1.1	1.1	1.2	1.4	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
17	93.5	90.8	83.4	92.6	95.0	95.8	11.0	12.0	1.3	-0.4
18	92.6	89.8	84.8	96.1	96.7	97.9	6.5	6.5	1.2	-0.5
19	92.8	90.4	83.7	92.3	94.5	95.8	10.5	11.0	1.4	-0.5
20	91.2	88.9	83.9	94.4	95.2	96.6	7.0	6.5	1.4	-0.5
Avs.	92.5	90.0	84.0	93.8	95.4	96.5	8.7	9.0	1.3	-0.5
Std Dv	0.9	0.8	0.6	1.8	0.9	1.0	2.3	2.9	0.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
25	93.5	90.7	84.1	96.2	95.8	96.7	9.0	9.5	1.0	-0.3
26	94.4	91.5	85.1	100.6	97.4	98.5	7.5	8.0	1.0	-0.3
27	96.3	93.1	87.3	101.0	99.9	100.5	8.5	8.5	0.6	-0.2
28	95.6	92.7	87.1	101.9	99.5	100.2	6.5	7.0	0.9	-0.3
Avs.	94.9	92.0	85.9	99.9	98.1	99.0	7.9	8.2	0.9	-0.3
Std Dv	1.3	1.1	1.5	2.5	1.9	1.8	1.1	1.0	0.2	0.1

BEST DOCUMENT AVAILABLE

TABLE NO. A.2-3.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G   CENTERLINE-CENTER (FLUSH)   JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(F)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
9	95.9	93.0	87.5	95.9	99.3	100.7	8.0	7.5	1.6	-0.6
10	94.5	91.6	87.8	97.4	99.6	100.5	5.0	5.5	0.9	-0.5
15	95.6	92.7	88.1	96.6	99.9	101.3	7.0	6.0	1.4	-0.5
16		----------		NO DATA		----------				
Avs.	95.4	92.4	87.8	96.6	99.6	100.8	6.7	6.3	1.3	-0.5
Std Dv	0.7	0.7	0.3	0.7	0.3	0.4	1.5	1.0	0.4	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
7	90.2	88.1	79.7	89.2	90.5	91.8	16.5	14.5	1.4	-0.4
8	91.5	89.7	82.8	92.1	94.3	95.6	9.0	9.0	1.3	-0.5
13	90.6	88.5	80.6	89.7	91.2	92.6	14.0	13.5	1.5	-0.4
14	90.7	88.8	82.3	92.7	93.5	94.6	9.0	9.0	1.1	-0.3
Avs.	90.8	88.8	81.4	90.9	92.4	93.7	12.1	11.5	1.3	-0.4
Std Dv	0.6	0.7	1.4	1.7	1.8	1.7	3.7	2.9	0.1	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
45	86.5	85.0	77.0	89.9	87.2	88.7	12.5	13.0	1.6	-0.4
46	86.6	85.1	75.5	87.7	85.6	86.9	20.0	21.0	1.3	-0.4
47	86.8	85.2	77.9	89.9	88.1	89.5	13.0	13.0	1.5	-0.4
48	87.5	85.9	77.2	88.9	87.7	89.0	16.0	16.0	1.3	-0.5
1	89.3	87.3	77.9	88.3	88.8	90.0	19.0	19.0	1.5	-0.4
2	88.6	86.9	79.5	91.5	90.0	91.2	12.0	12.0	1.2	-0.4
3	88.7	86.6	78.1	88.3	88.9	90.0	16.5	16.5	1.1	-0.4
4	88.1	86.5	78.5	90.2	89.1	90.2	13.5	13.5	1.1	-0.4
Avs.	87.8	86.0	77.7	89.3	88.2	89.4	15.3	15.5	1.3	-0.4
Std Dv	1.0	0.9	1.2	1.3	1.4	1.3	3.0	3.2	0.2	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	85.3	83.8	73.1	86.7	83.2	84.5	26.0	25.5	1.2	-0.4
6	85.3	83.9	76.0	87.5	86.6	88.0	17.5	16.5	1.4	-0.4
11	85.2	83.6	74.3	86.3	84.5	85.3	19.5	22.5	1.0	-0.3
12	84.9	83.5	74.1	87.4	84.2	85.9	16.5	16.5	1.6	-0.4
Avs.	85.2	83.7	74.4	87.0	84.6	85.9	19.9	20.2	1.3	-0.4
Std Dv	0.2	0.2	1.2	0.6	1.4	1.5	4.3	4.5	0.3	0.0

TABLE NO. A.2-4.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 1G CENTERLINE-CENTER (FLUSH) JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
69	99.2	96.5	89.1	96.8	101.0	101.9	13.0	12.5	0.9	-0.3
70	99.1	96.5	88.7	95.8	100.4	101.3	13.5	13.5	0.9	-0.5
Avg.	99.2	96.5	88.9	96.3	100.7	101.6	13.2	13.0	0.9	-0.4
Std Dv	0.1	0.1	0.3	0.7	0.4	0.4	0.4	0.7	0.0	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
61	90.9	88.7	81.3	87.3	92.7	94.1	14.5	12.5	1.4	-0.4
62	92.7	90.1	82.0	87.7	93.1	94.1	14.0	14.0	1.1	-0.4
63	90.9	88.8	81.0	87.1	92.0	93.6	12.5	12.0	1.5	-0.5
64	92.3	89.8	82.1	88.6	93.2	94.3	15.5	15.0	1.1	-0.4
Avg.	91.7	89.4	81.6	87.7	92.8	94.0	14.1	13.4	1.3	-0.4
Std Dv	0.9	0.7	0.5	0.6	0.5	0.3	1.2	1.4	0.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
57	92.5	90.4	85.2	94.9	96.1	97.4	7.5	8.0	1.3	-0.6
58	95.0	92.5	86.6	94.9	97.9	98.8	8.5	9.0	1.0	-0.7
59	94.2	92.1	87.0	95.7	97.6	98.6	6.5	7.5	1.1	-0.5
60	93.1	91.1	84.9	94.4	95.4	96.5	10.0	10.5	1.1	-0.6
Avg.	93.7	91.5	85.9	95.0	96.7	97.8	8.1	8.7	1.1	-0.6
Std Dv	1.1	1.0	1.0	0.6	1.2	1.1	1.5	1.3	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
65	94.9	92.2	86.6	98.5	97.9	98.8	8.0	8.5	1.2	-0.4
66	96.6	93.6	88.2	99.6	100.1	101.1	9.5	9.5	0.9	-0.3
67	95.4	92.8	88.1	99.3	99.5	100.3	6.0	7.5	1.6	-0.4
68	95.1	92.1	86.7	99.4	98.4	99.4	8.0	9.0	1.0	-0.4
Avg.	95.5	92.7	87.4	99.2	99.0	99.9	7.9	8.6	1.2	-0.4
Std Dv	0.8	0.7	0.8	0.5	1.0	1.0	1.4	0.9	0.3	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-1.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H   CENTERLINE-CENTER (10-METER)   JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
34	93.8	90.5	81.1	91.4	94.5	95.5	21.0	14.5	1.0	-0.4
36	95.8	92.0	85.7	94.2	98.2	99.5	10.0	9.5	1.3	-0.9
40	90.1	87.4	80.3	84.5	91.2	92.9	14.0	13.5	1.8	-1.2
42	96.2	92.9	85.8	93.7	97.7	98.9	14.5	13.5	1.2	-0.6
44	94.8	91.7	85.0	92.6	97.0	97.3	13.5	14.0	0.3	-0.6
54	94.2	91.7	86.1	93.6	97.6	98.3	12.5	12.5	1.0	-0.7
56	95.9	93.4	87.3	94.3	98.9	99.3	10.0	11.5	0.4	-0.4
Avs.	94.4	91.4	84.5	92.0	96.4	97.4	13.6	12.7	1.0	-0.7
Std Dv	2.1	2.0	2.7	3.5	2.7	2.4	3.7	1.7	0.5	0.3
TAKEOFF										
33	88.1	84.2	74.6	81.4	87.2	89.4	16.5	16.0	2.2	-1.5
35	88.0	84.7	76.3	81.2	87.9	89.9	14.0	13.5	2.0	-1.3
37	88.1	84.4	75.7	81.8	87.7	89.8	14.0	13.5	2.1	-1.5
39	-	85.1	77.5	81.8	89.2	91.3	13.0	-	2.1	-
41	88.1	84.7	77.2	82.0	88.8	90.8	12.5	13.0	2.0	-1.4
43	88.0	84.6	76.8	81.9	88.4	90.4	12.5	12.5	2.1	-1.3
53	87.7	84.6	76.1	79.8	87.5	89.4	16.0	16.0	1.9	-1.2
55	87.1	84.0	74.9	79.6	87.0	89.0	22.5	15.5	2.1	-1.3
Avs.	87.9	84.5	76.1	81.2	88.0	90.0	15.1	12.5	2.1	-1.4
Std Dv	0.4	0.3	1.0	0.9	0.8	0.8	3.3	5.2	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-2.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H CENTERLINE-CENTER (10-METER) JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
21	88.1	85.6	76.2	84.1	88.7	89.4	19.5	17.5	0.7	-0.6
22	90.1	87.6	82.2	88.4	93.8	94.2	9.0	9.0	0.9	-0.5
23	88.1	85.2	76.5	83.5	89.3	90.5	16.0	13.5	1.2	-0.6
24	89.9	87.2	81.2	88.7	93.0	93.4	10.5	11.0	0.4	-0.7
Avs.	89.1	86.4	79.0	86.2	91.2	91.8	13.7	12.7	0.8	-0.6
Std Dv	1.1	1.2	3.1	2.8	2.6	2.3	4.9	3.7	0.3	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
29	87.1	84.2	75.8	81.2	88.5	89.6	14.0	12.0	1.1	-0.7
30	86.1	83.0	76.0	83.2	88.3	89.8	10.5	9.0	1.5	-1.1
31	86.8	84.0	75.8	82.3	88.1	89.2	14.5	13.0	1.1	-0.8
32	84.7	81.4	74.6	85.2	87.2	88.4	12.0	10.0	1.2	-0.7
Avs.	86.2	83.1	75.5	83.0	88.0	89.2	12.7	11.0	1.2	-0.8
Std Dv	1.1	1.2	0.7	1.7	0.6	0.6	1.8	1.8	0.2	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
49	88.0	85.0	79.6	87.6	91.9	93.1	7.5	6.5	1.2	-0.8
50	88.2	85.2	77.9	86.0	90.5	92.0	11.0	9.5	1.5	-0.8
51	86.6	83.8	74.9	85.3	88.7	90.4	12.0	10.5	1.7	-1.0
52	87.0	84.0	7[illegible].7	86.0	88.8	90.1	10.0	10.0	1.3	-0.9
Avs.	87.5	84.5	77.8	86.2	90.0	91.4	10.1	9.1	1.4	-0.9
Std Dv	0.8	0.7	1.3	1.0	1.5	1.4	1.9	1.8	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
17	90.3	87.0	79.9	90.9	92.0	93.0	11.0	12.0	1.0	-0.6
18	88.7	85.7	81.1	93.8	93.4	94.3	6.5	6.0	1.2	-0.4
19	89.2	86.7	79.6	90.5	90.9	92.1	11.0	11.0	1.1	-0.6
20	87.7	84.8	79.8	92.7	91.8	93.0	7.0	6.5	1.2	-0.5
Avs.	89.0	86.1	80.1	92.0	92.0	93.1	8.9	8.9	1.1	-0.5
Std Dv	1.1	1.0	0.7	1.5	1.0	0.9	2.5	3.1	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
25	89.9	87.0	80.3	94.2	92.6	93.6	9.0	9.0	0.9	-0.4
26	90.4	87.0	81.1	98.9	94.2	95.1	7.5	7.5	1.0	-0.5
27	91.9	88.4	83.1	98.2	96.3	97.0	7.5	7.0	0.7	-0.2
28	92.1	88.3	82.9	101.4	96.5	97.4	7.0	6.5	0.9	-0.4
Avs.	91.1	87.6	81.8	98.2	94.9	95.8	7.7	7.5	0.9	-0.4
Std Dv	1.1	0.8	1.3	3.0	1.8	1.8	0.9	1.1	0.1	0.1

TABLE NO. A.2-3.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H CENTERLINE-CENTER (10-METER) JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
9	91.6	88.4	83.1	92.7	95.4	96.5	7.0	7.0	1.1	-0.6
10	91.7	88.1	84.3	96.1	97.0	97.9	5.0	5.0	1.0	-0.6
15	92.3	88.8	84.0	95.4	96.6	98.0	6.5	5.5	1.4	-0.7
16		----------		NO DATA		----------				
Avs.	91.9	88.4	83.8	94.7	96.3	97.5	6.2	5.8	1.1	-0.6
Std Dv	0.3	0.3	0.6	1.8	0.8	0.9	1.0	1.0	0.2	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
7	85.8	83.3	74.0	86.2	85.1	86.3	16.0	16.5	1.3	-0.6
8	86.2	83.8	77.2	89.4	88.1	88.9	10.5	11.0	0.9	-0.7
13	87.2	84.9	76.1	89.7	87.5	88.5	15.5	17.0	1.0	-0.5
14	87.6	85.1	79.2	92.0	90.7	91.6	8.5	9.0	1.1	-0.5
Avs.	86.7	84.3	76.6	89.3	87.8	88.8	12.6	13.4	1.1	-0.6
Std Dv	0.8	0.8	2.2	2.4	2.3	2.2	3.7	4.0	0.2	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
45	82.7	80.9	72.8	88.3	83.7	84.8	13.5	13.5	1.4	-0.5
46	83.4	81.6	72.1	87.5	83.2	84.7	19.0	16.5	1.5	-0.7
47	84.1	82.1	74.6	88.8	85.3	86.8	13.5	13.0	1.5	-0.6
48	84.6	82.9	74.2	88.0	85.1	86.3	15.5	15.0	1.3	-0.6
1	83.4	81.1	71.6	84.2	83.2	84.4	19.0	19.0	1.2	-0.7
2	82.6	80.3	72.6	87.8	83.8	85.4	12.0	11.5	1.6	-0.4
3	83.1	80.6	71.7	84.2	83.7	84.9	16.5	19.0	1.2	-0.4
4	82.6	80.3	72.0	86.5	82.9	84.2	14.0	14.5	1.3	-0.5
Avs.	83.3	81.2	72.7	86.9	83.8	85.2	15.4	15.2	1.4	-0.5
Std Dv	0.7	0.9	1.1	1.8	0.9	0.9	2.6	2.7	0.1	0.1
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	80.5	78.9	67.8	83.7	78.1	79.3	29.5	31.5	1.3	-0.6
6	-	78.1	69.9	84.2	80.0	81.5	17.5	-	1.5	-
11	81.7	79.8	69.8	85.4	80.4	81.2	23.5	32.0	1.5	-0.9
12	81.2	79.6	69.6	87.1	80.1	81.8	18.0	17.5	1.7	-0.6
Avs.	81.1	79.1	69.3	85.1	79.7	81.0	22.1	20.2	1.5	-0.7
Std Dv	0.6	0.8	1.0	1.5	1.0	1.1	5.6	15.1	0.1	0.2

TABLE NO. A.2-4.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 1H CENTERLINE-CENTER (10-METER) JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
69	94.6	91.3	83.8	91.6	96.8	97.4	13.0	12.5	0.7	-0.5
70	93.7	90.7	82.8	90.1	95.2	95.6	13.5	13.5	0.6	-0.6
Avg.	94.2	91.0	83.3	90.9	96.0	96.5	13.2	13.0	0.6	-0.5
Std Dv	0.6	0.4	0.7	1.0	1.1	1.3	0.4	0.7	0.0	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
61	87.9	85.2	77.8	84.9	90.1	91.3	15.0	11.5	1.2	-0.6
62	87.8	84.9	77.2	80.5	88.6	90.5	12.5	11.5	1.8	-1.1
63	88.3	85.4	77.7	84.7	89.9	91.4	12.0	11.0	1.5	-0.6
64	89.4	86.6	78.9	86.1	90.7	91.8	15.0	15.0	1.1	-0.5
Avg.	88.3	85.6	77.9	84.1	89.8	91.2	13.6	12.2	1.4	-0.7
Std Dv	0.7	0.7	0.7	2.4	0.9	0.6	1.6	1.8	0.3	0.3
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
57	89.7	87.1	82.0	93.0	93.2	94.5	7.5	7.5	1.2	-0.7
58	91.7	89.0	82.9	92.6	94.7	95.9	8.5	8.0	1.3	-0.7
59	91.1	88.5	83.7	93.7	95.4	96.6	6.5	6.5	1.2	-0.6
60	91.2	88.4	82.1	94.2	93.7	95.1	9.5	9.5	1.4	-0.7
Avg.	90.9	88.2	82.7	93.4	94.3	95.5	8.0	7.9	1.3	-0.7
Std Dv	0.9	0.8	0.8	0.7	1.0	0.9	1.3	1.2	0.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
65		----------		NO DATA		----------				
66	94.3	90.3	84.3	100.8	96.9	97.9	10.0	10.5	1.0	-0.6
67	92.1	88.8	83.4	99.0	95.7	96.8	7.0	7.5	1.1	-0.5
68	91.2	87.8	82.2	96.4	94.8	96.0	8.0	8.0	1.2	-0.5
Avg.	92.6	89.0	83.3	98.7	95.8	96.9	8.3	8.7	1.1	-0.5
Std Dv	1.6	1.3	1.1	2.2	1.0	0.9	1.5	1.6	0.1	0.0

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-1.2

SIKORSKY S-76 SPIRIT HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
11/28/80

SITE: 2 CENTERLINE - 150 M. WEST JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
34	96.5	93.2	86.4	94.6	98.4	99.2	11.5	11.5	0.7	-0.6
36	98.8	95.4	90.0	96.7	101.6	103.6	9.0	9.0	1.9	-1.3
40	97.7	94.4	88.9	96.3	100.3	101.3	10.5	11.0	1.0	-0.9
42	97.4	94.1	88.8	96.1	100.3	101.7	9.0	9.0	1.4	-0.9
44	97.4	93.9	87.2	95.2	99.4	100.5	9.5	9.5	1.4	-1.0
54	97.7	94.8	88.6	96.0	100.1	101.5	11.5	11.5	1.4	-0.8
56	96.9	94.0	88.9	96.3	100.8	102.1	8.5	8.0	1.3	-0.8
Avg.	97.5	94.3	88.4	95.9	100.1	101.4	9.9	9.9	1.3	-0.9
Std Dv	0.7	0.7	1.2	0.7	1.0	1.4	1.2	1.4	0.4	0.2
TAKEOFF										
33	-	87.0	79.2	82.9	90.9	92.4	10.0	-	1.6	-
35	89.7	86.6	80.0	82.4	91.3	92.8	11.0	11.0	1.5	-1.3
37	90.0	86.5	79.1	82.7	90.8	92.6	11.5	11.0	1.8	-1.4
39	89.9	86.7	79.6	81.9	90.8	92.6	12.0	11.5	1.8	-1.3
41	89.7	86.6	79.9	82.5	90.7	92.4	11.5	11.0	1.7	-1.3
43	89.5	86.4	79.2	82.4	90.0	91.7	12.0	12.0	1.8	-1.4
53	89.4	86.5	79.8	81.7	91.2	92.4	11.0	11.5	1.2	-1.2
55	88.9	85.8	77.3	81.4	88.7	90.4	14.0	14.0	1.6	-1.2
Avg.	89.6	86.5	79.3	82.2	90.6	92.2	11.6	10.2	1.6	-1.3
Std Dv	0.4	0.3	0.9	0.5	0.8	0.8	1.2	4.3	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-2.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
11/28/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
21	88.8	86.1	77.1	82.4	89.2	90.6	19.5	17.0	1.4	-0.9
22	91.4	88.8	84.2	91.4	95.8	96.4	7.5	8.0	0.6	-0.9
23	89.2	86.3	76.9	83.0	89.4	90.2	18.0	17.0	1.1	-0.9
24	91.5	88.7	83.3	90.7	95.1	95.8	10.0	10.5	0.6	-0.6
Avg.	90.2	87.5	80.4	86.9	92.4	93.2	13.7	13.1	0.9	-0.9
Std Dv	1.4	1.5	3.9	4.8	3.6	3.3	5.9	4.6	0.4	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
29	87.5	84.9	77.2	81.7	89.4	90.5	13.5	12.0	1.1	-0.8
30	86.0	83.3	76.9	82.1	88.6	89.9	9.5	9.0	1.2	-1.1
31	87.1	84.6	77.3	81.7	89.1	90.3	12.5	11.5	1.1	-0.8
32	85.1	82.4	74.6	79.8	86.6	87.6	12.0	12.0	1.0	-0.9
Avg.	86.5	83.8	76.5	81.3	88.4	89.6	11.9	11.1	1.1	-0.9
Std Dv	1.1	1.2	1.3	1.0	1.3	1.4	1.7	1.4	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
49	-	84.9	78.9	87.7	90.7	91.9	8.5	-	1.2	-
50	89.6	86.6	80.3	86.7	92.2	93.6	9.5	8.5	1.4	-1.0
51	87.3	84.5	77.5	85.7	89.1	90.6	11.5	10.5	1.5	-1.1
52	87.3	84.6	77.5	85.9	89.2	90.4	11.0	10.5	1.3	-0.9
Avg.	88.1	85.2	78.6	86.5	90.3	91.7	10.1	7.4	1.4	-1.0
Std Dv	1.3	1.0	1.3	0.9	1.5	1.5	1.4	5.0	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
17	90.6	87.8	81.4	91.9	93.4	94.3	10.0	10.0	0.9	-0.7
18	89.7	86.9	82.1	94.9	93.8	95.3	6.5	6.5	1.5	-0.7
19	-	87.0	80.6	92.1	91.9	93.1	10.0	-	1.2	-
20	-	85.8	80.6	94.3	91.9	93.5	6.5	-	1.6	-
Avg.	90.2	86.9	81.2	93.3	92.7	94.0	8.2	4.1	1.3	-0.7
Std Dv	0.7	0.8	0.8	1.5	1.0	1.0	2.0	5.0	0.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
25	90.7	87.7	81.5	96.5	93.6	94.5	9.0	9.5	0.9	-0.7
26	91.4	88.4	82.2	100.2	94.7	95.6	7.5	7.5	0.9	-0.6
27	93.3	90.0	84.4	100.5	97.3	97.7	8.0	8.5	0.5	-0.4
28	92.1	88.8	83.0	101.0	95.9	97.0	7.0	6.5	1.1	-0.6
Avg.	91.9	88.7	82.8	99.6	95.4	96.2	7.9	8.0	0.8	-0.6
Std Dv	1.1	1.0	1.3	2.1	1.6	1.4	0.9	1.3	0.3	0.1

TABLE NO. A.2-3.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/12/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
9	92.8	89.6	84.7	95.2	96.9	98.1	6.0	5.5	1.2	-0.9
10	91.3	87.9	83.9	95.2	96.7	97.3	5.5	5.0	0.6	-0.7
15	92.6	89.5	85.1	95.1	97.3	98.3	6.5	6.0	1.0	-0.8
16	92.9	89.6	85.9	96.1	98.5	99.6	5.0	4.5	1.1	-0.6
Avg.	92.4	89.2	84.9	95.4	97.3	98.3	5.7	5.2	1.0	-0.8
Std Dv	0.7	0.8	0.8	0.5	0.8	0.9	0.6	0.6	0.3	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
7	86.4	84.3	75.1	87.6	86.2	87.2	18.0	18.5	1.1	-0.8
8	86.5	84.4	76.9	90.2	88.2	89.4	10.5	10.0	1.4	-1.0
13	87.5	85.4	77.7	88.6	88.7	89.7	14.0	14.5	1.1	-0.7
14	87.6	35.2	78.8	91.3	89.8	91.3	9.0	9.0	1.5	-0.7
Avg.	87.0	84.8	77.1	89.4	88.2	89.4	12.9	13.0	1.3	-0.8
Std Dv	0.6	0.6	1.5	1.6	1.5	1.7	4.0	4.4	0.2	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
45	83.6	81.7	72.9	88.8	83.3	84.7	14.5	15.0	1.8	-0.9
46	83.4	81.6	72.8	88.0	83.4	84.7	17.5	17.5	1.3	-0.7
47	83.9	82.2	73.6	88.8	84.3	85.2	14.5	15.0	1.0	-0.6
48	84.2	82.8	75.0	87.8	84.9	86.1	15.5	16.0	1.2	-0.5
1	85.8	83.8	74.4	87.3	85.9	86.8	17.5	21.0	0.9	-0.7
2	85.1	83.1	75.4	90.9	86.3	87.3	13.0	13.0	1.2	-0.6
3	85.4	83.5	74.7	87.1	85.8	87.1	24.0	23.0	1.3	-0.4
4	84.7	83.0	74.9	89.9	85.6	87.0	13.0	12.0	1.4	-0.8
Avg.	84.5	82.7	74.2	88.6	84.9	86.1	16.2	16.6	1.3	-0.6
Std Dv	0.9	0.8	1.0	1.3	1.1	1.1	3.6	3.8	0.3	0.1
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	82.0	80.4	70.1	85.4	80.1	81.3	24.0	27.0	1.3	-0.6
6	81.0	79.5	69.7	85.7	79.5	80.6	23.5	24.0	1.2	-0.7
11	81.7	80.6	70.9	85.1	81.2	82.1	33.0	21.0	1.2	-0.7
12	81.1	79.6	70.4	85.7	80.2	81.6	17.0	18.0	1.4	-0.8
Avg.	81.4	80.0	70.2	85.5	80.2	81.4	24.4	22.5	1.3	-0.7
Std Dv	0.5	0.5	0.5	0.3	0.7	0.6	6.6	3.9	0.1	0.1

TABLE NO. A.2-4.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
11/28/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
69	96.2	93.3	87.8	95.3	99.6	100.4	9.5	10.0	0.8	-0.6
70	95.3	92.4	84.8	93.4	97.0	97.7	14.0	13.5	0.6	-0.6
Avg.	95.8	92.8	86.3	94.3	98.3	99.0	11.7	11.7	0.7	-0.6
Std Dv	0.7	0.6	2.2	1.4	1.8	2.0	3.2	2.5	0.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
61	88.1	85.3	75.9	83.1	87.7	89.2	17.0	16.5	1.5	-1.1
62	89.8	87.0	79.6	84.9	91.1	92.3	14.0	13.0	1.4	-0.9
63	87.1	84.7	76.4	83.3	87.8	88.9	32.5	13.5	1.3	-0.8
64	89.7	86.6	79.7	86.7	91.6	92.5	12.0	11.5	0.8	-1.0
Avg.	88.7	85.9	77.9	84.5	89.5	90.7	18.9	13.6	1.3	-0.9
Std Dv	1.3	1.1	2.0	1.7	2.1	1.9	9.3	2.1	0.3	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
57	89.9	87.1	82.0	94.1	92.9	94.5	7.5	9.5	1.6	-1.0
58	92.1	89.3	82.8	93.2	94.3	95.8	10.0	9.5	1.4	-1.0
59	90.9	88.1	83.1	93.3	94.6	96.2	7.0	7.0	1.6	-1.0
60	90.4	87.9	81.5	92.7	92.5	94.2	10.0	10.0	1.6	-1.0
Avg.	90.8	88.1	82.4	93.3	93.6	95.2	8.6	9.0	1.6	-1.0
Std Dv	0.9	0.9	0.7	0.6	1.0	1.0	1.6	1.4	0.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
65	92.7	89.7	85.3	97.9	97.3	98.0	7.0	7.5	0.6	-0.7
66	93.0	89.3	84.1	98.5	96.2	97.3	8.0	9.5	1.1	-0.5
67	93.0	89.4	85.0	98.2	97.0	98.2	7.0	9.0	1.2	-0.7
68	-	88.3	82.6	97.8	94.4	95.7	8.5	-	1.3	-
Avg.	92.9	89.2	84.3	98.1	96.2	97.3	7.6	6.5	1.1	-0.6
Std Dv	0.2	0.6	1.2	0.3	1.3	1.1	0.7	4.4	0.3	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-1.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/12/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
34	93.9	90.6	81.2	91.4	94.2	95.6	25.0	21.0	1.4	-0.8
36	94.9	91.4	83.6	92.8	95.9	96.9	14.0	14.5	1.1	-0.8
40	95.7	92.4	85.9	93.2	97.3	98.2	14.5	16.5	1.0	-0.9
42	95.1	91.9	85.0	92.1	96.1	97.2	14.0	14.0	1.2	-0.7
44		----------		NO DATA		----------				
54	94.9	91.8	84.9	91.0	96.0	97.7	13.0	14.0	1.8	-1.0
56	94.6	91.4	84.4	91.9	95.7	96.7	13.0	14.0	1.6	-1.0
Avg.	94.9	91.6	84.2	92.1	95.9	97.1	15.6	15.7	1.3	-0.9
Std Dv	0.6	0.6	1.6	0.8	1.0	0.9	4.7	2.8	0.3	0.1
TAKEOFF										
33	87.3	83.8	74.6	80.7	85.9	88.3	17.0	16.0	2.5	-1.6
35	86.4	83.4	74.5	78.8	85.3	87.1	16.5	16.0	1.9	-1.5
37	86.3	83.3	73.9	79.6	85.1	87.1	17.0	16.5	2.0	-1.4
39	87.1	84.4	75.9	79.6	87.2	89.4	15.0	14.0	2.2	-1.3
41	87.1	84.5	76.3	79.9	87.2	89.5	14.0	13.5	2.3	-1.4
43	86.7	83.9	75.4	79.4	86.5	88.9	14.5	13.5	2.4	-1.4
53	85.9	83.3	74.4	78.4	85.4	87.4	17.5	16.5	2.2	-1.4
55	85.1	82.4	73.8	77.6	84.2	86.1	16.0	15.5	1.9	-1.3
Avg.	86.5	83.6	74.9	79.2	85.9	88.0	15.9	15.2	2.2	-1.4
Std Dv	0.7	0.7	0.9	1.0	1.0	1.2	1.3	1.3	0.2	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-2.3

SIKORSKY S-76 SPIRIT HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
12/ 3/80

SITE: 3 CENTERLINE - 150 M. EAST JUNE 23,1980

500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
21	88.1	85.5	76.7	82.7	88.6	89.7	20.5	17.0	1.0	-0.8
22	87.8	85.1	77.3	84.1	88.1	89.5	12.5	12.5	1.5	-1.0
23	87.3	84.6	75.5	82.1	87.9	88.7	16.0	14.5	1.3	-0.8
24	88.7	85.7	76.9	84.4	88.9	90.8	13.5	12.0	2.7	-1.1
Avs.	88.0	85.3	76.6	83.3	88.4	89.7	15.6	14.0	1.6	-0.9
Std Dv	0.6	0.5	0.8	1.1	0.5	0.9	3.6	2.3	0.7	0.2

500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
29	87.3	84.5	77.1	81.3	88.7	89.8	13.5	13.5	1.1	-0.8
30	85.5	82.9	75.1	81.6	87.5	88.8	11.5	10.5	1.2	-1.0
31	85.7	83.3	75.1	80.0	86.6	87.7	16.5	15.0	1.1	-0.7
32	83.7	81.2	73.5	79.3	85.6	86.9	15.5	11.0	1.3	-0.9
Avs.	85.6	83.0	75.2	80.6	87.1	88.3	14.2	12.5	1.2	-0.9
Std Dv	1.4	1.4	1.5	1.1	1.3	1.3	2.2	2.1	0.1	0.1

500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
49	87.7	85.1	78.7	88.2	90.4	91.3	8.5	8.5	0.9	-0.7
50	87.7	84.9	78.1	85.4	89.7	90.9	10.5	10.0	1.2	-0.9
51	85.6	83.1	76.0	86.5	88.0	89.3	12.5	10.5	1.3	-0.8
52	86.2	83.7	76.8	86.6	87.7	89.1	11.0	10.5	1.3	-0.9
Avs.	86.8	84.2	77.4	86.7	89.0	90.2	10.6	9.9	1.2	-0.8
Std Dv	1.0	1.0	1.2	1.1	1.3	1.1	1.7	0.9	0.2	0.1

500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
17	89.3	86.7	79.1	91.9	90.6	91.7	12.0	11.5	1.1	-0.7
18	88.8	85.9	80.3	96.3	92.6	93.8	7.0	6.0	1.2	-0.5
19	89.0	86.6	80.3	92.8	91.1	92.3	10.5	10.5	1.2	-0.8
20	87.1	84.4	78.9	94.2	90.7	91.8	8.0	7.5	1.1	-0.6
Avs.	88.5	85.9	79.6	93.8	91.2	92.4	9.4	8.9	1.2	-0.7
Std Dv	1.0	1.1	0.8	1.9	0.9	1.0	2.3	2.6	0.1	0.1

500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
25	89.7	86.8	80.5	96.5	92.1	93.0	9.5	11.0	0.7	-0.7
26	90.2	87.3	81.0	99.7	93.4	94.1	8.0	8.0	0.9	-0.6
27	92.5	89.1	83.4	100.3	96.0	96.5	8.0	9.0	0.5	-0.5
28	91.2	88.1	81.8	100.8	94.9	95.5	8.0	7.5	0.7	-0.5
Avs.	90.9	87.8	81.7	99.3	94.1	94.8	8.4	8.9	0.7	-0.6
Std Dv	1.2	1.0	1.3	2.0	1.7	1.6	0.7	1.5	0.1	0.1

TABLE NO. A.2-3.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/ 3/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 23,1980

300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
9	93.5	90.5	85.2	94.7	97.4	98.3	7.5	7.5	0.9	-0.7
10	91.9	89.0	85.0	96.1	97.1	98.1	5.5	5.5	1.0	-0.7
15	90.8	88.1	83.1	94.5	94.7	95.5	7.5	7.5	0.8	-0.7
16	91.0	87.7	83.4	96.9	95.6	96.8	5.5	5.5	1.2	-0.7
Avs.	91.8	88.8	84.2	95.6	96.2	97.2	6.5	6.5	1.0	-0.7
Std Dv	1.2	1.2	1.1	1.2	1.3	1.3	1.2	1.2	0.2	0.0

700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
7	88.9	86.7	79.5	89.5	90.0	91.1	14.0	15.0	1.1	-0.7
8	87.0	85.3	77.7	91.3	89.0	90.1	10.5	9.5	1.1	-0.7
13	86.4	84.4	77.0	88.8	87.1	88.4	14.0	15.0	1.3	-0.7
14	87.3	85.0	78.1	92.4	89.9	90.7	9.5	9.0	0.8	-0.5
Avs.	87.4	85.3	78.1	90.5	89.0	90.1	12.0	12.1	1.1	-0.7
Std Dv	1.1	1.0	1.1	1.7	1.4	1.2	2.3	3.3	0.2	0.1

1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
45	83.3	81.7	73.7	89.4	84.3	85.3	13.0	13.5	1.0	-0.6
46	84.1	82.1	72.3	87.7	82.6	84.4	23.0	23.5	1.8	-0.7
47	83.3	81.7	73.8	89.5	83.6	84.6	15.0	15.5	1.4	-0.6
48	84.2	82.3	75.1	88.6	84.6	85.9	13.5	17.5	1.3	-0.9
1	87.3	85.4	77.2	88.4	86.8	87.9	16.0	19.5	1.2	-0.8
2	86.2	84.5	76.0	91.0	86.7	88.1	13.0	12.5	1.4	-0.7
3	86.3	84.5	76.9	87.2	87.0	88.1	13.5	17.0	1.0	-0.6
4	85.2	83.5	75.0	89.3	85.2	86.4	15.5	16.0	1.2	-0.6
Avs.	85.0	83.2	75.0	88.9	85.1	86.3	15.3	16.9	1.3	-0.7
Std Dv	1.5	1.5	1.7	1.2	1.6	1.5	3.3	3.5	0.3	0.1

1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
5	83.1	81.9	72.6	86.6	81.5	82.7	22.5	27.0	1.2	-0.7
6	82.3	81.2	71.3	85.8	81.5	82.6	19.0	19.0	1.1	-0.6
11	82.9	81.4	72.9	85.4	81.5	82.8	18.5	28.0	1.3	-0.5
12	81.8	80.7	70.0	85.8	80.4	81.6	21.0	20.5	1.3	-0.7
Avs.	82.5	81.3	71.7	85.9	81.2	82.5	20.2	23.6	1.2	-0.6
Std Dv	0.6	0.5	1.3	0.5	0.6	0.6	1.8	4.5	0.1	0.1

TABLE NO. A.2-4.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/12/81

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
69	95.7	92.4	83.7	92.4	96.2	97.0	17.0	16.0	0.8	-0.8
70	95.7	92.6	84.8	92.8	97.0	98.2	13.5	13.5	1.2	-0.9
Avg.	95.7	92.5	84.3	92.6	96.6	97.6	15.2	14.7	1.0	-0.8
Std Dv	0.0	0.1	0.7	0.3	0.6	0.8	2.5	1.8	0.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
61	87.3	84.6	76.7	84.9	88.4	89.8	18.5	16.0	1.4	-0.9
62	89.2	86.5	78.4	84.6	89.6	91.1	19.0	18.5	1.5	-0.9
63	87.0	84.2	75.9	83.1	87.4	89.0	13.5	13.5	1.6	-1.0
64	88.1	85.1	77.7	84.4	89.1	90.4	13.5	14.5	1.3	-0.7
Avg.	87.9	85.1	77.2	84.2	88.6	90.1	16.1	15.6	1.5	-0.8
Std Dv	1.0	1.0	1.1	0.8	1.0	0.9	3.0	2.2	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
57	89.1	86.4	79.8	94.9	90.9	92.5	8.5	10.5	1.6	-1.0
58	91.0	88.5	83.5	94.0	94.0	95.4	8.5	9.0	1.5	-1.0
59	90.1	87.3	81.3	94.3	93.0	94.1	8.0	8.5	1.1	-0.9
60	90.3	87.7	82.1	93.8	92.8	94.4	7.5	9.5	1.6	-0.8
Avg.	90.1	87.5	81.7	94.3	92.7	94.1	8.1	9.4	1.4	-0.9
Std Dv	0.8	0.9	1.5	0.5	1.3	1.2	0.5	0.9	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
65	90.9	87.6	80.9	98.1	92.7	94.0	9.5	10.5	1.2	-0.8
66	-	89.2	83.9	99.4	96.0	97.0	8.0	-	1.0	-
67	91.0	87.7	81.5	98.7	93.0	94.2	8.0	9.5	1.3	-0.9
68	91.0	87.3	83.3	99.2	95.5	96.3	6.0	8.0	0.8	-0.8
Avg.	91.0	87.9	82.4	98.9	94.3	95.4	7.9	7.0	1.1	-0.8
Std Dv	0.1	0.9	1.4	0.6	1.7	1.5	1.4	4.8	0.2	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-1.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE -164M. NORTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
34	93.7	90.7	81.4	88.6	93.4	95.3	23.0	19.5	2.0	-1.1
36	93.3	90.7	82.5	89.2	94.0	95.1	17.0	16.5	1.3	-0.7
40	93.9	91.1	82.4	88.0	93.3	95.0	17.5	17.0	1.6	-1.0
42	93.9	91.2	81.4	87.8	92.6	94.0	19.0	19.0	1.8	-0.9
44	94.2	91.2	82.8	89.3	93.9	95.8	17.0	16.5	1.9	-1.0
54	92.4	90.1	80.4	86.2	91.3	92.5	21.5	21.5	1.3	-0.8
56	91.8	89.1	79.6	85.2	90.3	91.6	22.0	22.0	1.4	-0.8
Avg.	93.3	90.6	81.5	87.8	92.7	94.2	19.6	18.9	1.6	-0.9
Std Dv	0.9	0.7	1.2	1.6	1.4	1.6	2.6	2.3	0.3	0.2
TAKEOFF										
33	92.0	88.5	79.1	83.6	90.9	92.9	16.5	16.5	1.9	-1.7
35	91.5	88.5	79.8	84.4	90.4	92.1	16.5	17.5	1.7	-1.6
37	91.6	88.6	80.1	84.4	90.7	92.5	16.5	17.5	1.8	-1.6
39	91.7	88.6	79.6	84.4	90.5	92.0	17.5	18.0	1.9	-1.5
41	91.4	88.6	79.9	84.5	90.7	92.6	15.5	16.0	1.8	-1.6
43	91.1	88.1	79.4	84.3	90.0	91.9	18.0	18.5	1.8	-1.6
53	90.5	87.2	78.3	83.0	89.5	91.2	15.5	16.0	1.7	-1.4
55	90.3	87.0	77.6	82.9	89.1	91.0	18.0	18.0	1.9	-1.6
Avg.	91.2	88.1	79.2	83.9	90.2	92.0	16.7	17.2	1.8	-1.6
Std Dv	0.6	0.7	0.9	0.7	0.6	0.7	1.0	1.0	0.1	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THF PNLT CALCULATIONS

TABLE NO. A.2-2.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE -164M. NORTH UNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYBY - TARGET INDICATED AIRSPEED 93 KTS										
21	87.7	85.7	76.2	81.7	87.0	88.3	18.5	18.5	1.3	-1.0
22	89.3	86.8	77.6	84.7	89.8	91.1	15.5	14.0	1.3	-0.7
23	86.9	84.5	74.4	81.8	85.3	86.9	23.5	21.5	1.9	-1.2
24	88.2	85.5	75.3	81.8	87.9	89.2	19.5	17.5	1.4	-0.7
Avs.	88.0	85.6	75.9	82.5	87.5	88.9	19.2	17.9	1.5	-0.9
Std Dv	1.0	0.9	1.4	1.5	1.9	1.8	3.3	3.1	0.3	0.2
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS										
29	88.1	85.7	76.8	83.7	87.7	89.1	16.0	16.5	1.4	-0.9
30	87.3	85.5	77.4	83.3	87.8	89.3	14.0	14.5	1.5	-1.0
31	87.5	85.2	76.5	83.0	87.4	88.8	15.5	15.5	1.4	-0.9
32	87.0	85.2	76.7	82.9	87.5	88.9	15.5	15.0	1.3	-0.9
Avs.	87.5	85.4	76.9	83.2	87.6	89.0	15.2	15.4	1.4	-0.9
Std Dv	0.5	0.2	0.4	0.4	0.2	0.2	0.9	0.9	0.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS										
49	-	86.5	79.0	86.4	89.8	90.5	11.5	-	0.7	-
50	88.1	85.7	78.2	88.8	89.2	90.7	11.0	11.5	1.7	-0.9
51	87.8	86.0	78.1	85.1	88.8	89.5	13.5	14.5	0.6	-0.7
52	87.5	84.9	77.0	89.3	88.7	90.4	11.5	12.5	1.8	-1.0
Avs.	87.8	85.8	78.1	87.4	89.1	90.3	11.9	9.6	1.2	-0.8
Std Dv	0.3	0.7	0.9	2.0	0.5	0.5	1.1	6.5	0.6	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
17	90.1	87.4	79.8	92.2	90.7	92.7	13.0	12.5	1.9	-1.1
18	90.5	88.8	82.5	93.1	93.3	94.1	9.0	9.0	0.8	-0.7
19	90.0	87.6	80.2	94.0	91.1	92.6	12.0	11.5	1.4	-1.1
20	89.8	88.0	81.5	92.5	92.2	93.4	10.0	10.0	1.2	-0.8
Avs.	90.1	88.0	81.0	92.9	91.8	93.2	11.0	10.7	1.4	-0.9
Std Dv	0.3	0.6	1.2	0.8	1.1	0.7	1.8	1.6	0.5	0.2
500 FT FLYBY - TARGET INDICATED AIRSPEED 155 KTS										
25	92.9	89.5	82.9	99.9	94.5	96.2	9.0	9.5	1.7	-0.8
26	92.1	89.7	83.1	98.1	94.1	95.4	9.5	10.0	1.4	-0.9
27	94.4	90.2	83.6	101.5	96.1	97.4	9.0	10.5	1.4	-1.0
28	92.7	90.3	83.9	98.8	94.8	95.9	8.5	9.0	1.2	-0.8
Avs.	93.0	89.9	83.4	99.6	94.9	96.2	9.0	9.7	1.4	-0.9
Std Dv	1.0	0.4	0.5	1.5	0.8	0.9	0.4	0.6	0.2	0.1

TABLE NO. A.2-3.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE -164M. NORTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
9	92.0	89.1	82.7	95.3	94.4	95.6	8.0	8.5	1.1	-1.0
10	91.8	89.5	83.6	91.4	94.5	96.0	8.0	8.0	1.5	-1.1
15	91.4	88.5	82.7	94.9	94.1	95.5	8.0	9.0	1.4	-1.0
16	92.8	90.7	83.9	93.1	94.8	96.1	8.0	8.5	1.3	-0.9
Avs.	92.0	89.4	83.2	93.7	94.4	95.8	8.0	8.5	1.4	-1.0
Std Dv	0.6	0.9	0.6	1.8	0.3	0.3	0.0	0.4	0.2	0.1
700 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
7	88.4	85.9	77.0	92.6	87.8	89.2	15.5	16.0	1.7	-0.8
8	87.9	86.1	78.2	90.5	88.9	90.6	12.0	11.5	1.7	-0.9
13	89.0	86.6	77.9	92.4	88.9	90.5	14.5	14.5	1.6	-1.0
14	88.7	86.9	78.8	91.9	89.7	90.4	12.0	12.5	0.7	-0.9
Avs.	88.5	86.4	78.0	91.9	88.9	90.2	13.5	13.6	1.4	-0.9
Std Dv	0.5	0.5	0.8	0.9	0.8	0.7	1.8	2.0	0.5	0.1
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
45	86.3	84.3	75.9	90.1	86.6	88.2	14.5	13.5	1.6	-1.1
46	85.6	83.6	74.0	92.4	84.5	85.8	19.5	21.0	1.5	-0.7
47	86.6	84.3	75.1	90.4	87.0	88.6	16.0	15.0	1.6	-1.1
48	86.4	84.0	74.9	92.7	85.6	87.2	16.5	17.0	1.7	-0.8
1	86.9	84.5	74.6	91.4	85.3	86.9	18.5	22.0	1.6	-0.7
2	87.0	84.9	76.4	92.2	87.1	88.3	14.0	14.0	1.3	-1.0
3	86.6	84.4	75.1	91.0	86.2	87.6	17.0	16.0	1.5	-0.5
4	86.7	84.4	74.9	90.5	86.3	87.7	15.0	14.5	1.3	-1.1
Avs.	86.5	84.3	75.1	91.3	86.1	87.5	16.4	16.6	1.5	-0.9
Std Dv	0.4	0.4	0.7	1.0	0.9	0.9	1.9	3.2	0.1	0.2
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
5	83.3	81.4	70.8	89.4	81.4	82.2	24.5	25.5	0.8	-0.6
6	83.3	81.5	70.9	87.3	81.6	82.8	23.0	22.5	1.2	-0.9
11	83.7	81.6	71.4	89.2	82.6	83.3	21.5	27.0	0.8	-0.8
12	83.2	81.6	71.8	87.1	82.2	83.7	18.0	17.5	1.4	-1.0
Avs.	83.4	81.5	71.2	88.3	81.9	83.0	21.7	23.1	1.0	-0.8
Std Dv	0.2	0.1	0.5	1.2	0.6	0.7	2.8	4.2	0.3	0.2

TABLE NO. A.2-4.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 4 SIDELINE -164M. NORTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
69	92.1	89.4	80.2	87.4	92.0	93.6	17.0	15.5	1.6	-0.9
70	92.1	89.6	80.7	86.6	92.1	94.2	19.0	17.5	2.2	-1.0
Avs.	92.1	89.5	80.5	87.0	92.1	93.9	18.0	16.5	1.9	-1.0
Std Dv	0.0	0.2	0.4	0.6	0.1	0.4	1.4	1.4	0.4	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 93 KTS										
61	87.8	85.4	75.8	82.4	87.1	88.1	21.0	21.0	1.1	-0.9
62	87.6	85.2	76.1	83.5	87.2	89.1	16.0	15.5	1.8	-1.0
63	87.1	84.9	75.1	81.6	86.0	87.6	19.5	19.0	1.6	-0.8
64	87.2	84.7	75.1	83.1	87.2	88.8	17.5	14.5	1.5	-0.8
Avs.	87.4	85.0	75.5	82.7	86.9	88.4	18.5	17.5	1.5	-0.9
Std Dv	0.3	0.3	0.5	0.9	0.6	0.7	2.2	3.0	0.3	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
57	91.0	89.0	81.9	93.9	93.0	94.4	11.0	11.0	1.4	-0.7
58	90.9	87.9	80.9	97.0	93.5	94.8	11.0	10.5	1.4	-0.9
59	91.4	89.3	81.9	94.0	93.2	94.3	10.5	10.5	1.1	-0.7
60	90.3	87.1	80.1	96.6	92.5	94.0	10.5	10.5	1.5	-1.0
Avs.	90.9	88.3	81.2	95.4	93.0	94.4	10.7	10.6	1.3	-0.8
Std Dv	0.4	1.0	0.9	1.6	0.4	0.3	0.3	0.2	0.2	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 155 KTS										
65	92.4	90.1	82.7	96.1	93.8	95.1	10.5	11.0	1.2	-0.7
66	92.2	88.4	81.9	99.1	94.0	95.4	10.0	11.5	1.4	-0.9
67	92.7	90.2	82.9	96.9	94.1	95.3	10.5	12.0	1.1	-0.6
68	92.0	88.6	82.0	99.9	94.3	95.6	9.0	9.5	1.4	-0.8
Avs.	92.3	89.3	82.4	98.0	94.1	95.3	10.0	11.0	1.3	-0.8
Std Dv	0.3	1.0	0.5	1.8	0.2	0.2	0.7	1.1	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

TABLE NO. A.2-1.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/17/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
34	90.6	87.5	78.1	85.9	90.7	91.7	27.5	22.0	1.0	-0.7
36	91.3	87.6	78.4	86.1	90.6	92.2	20.0	19.5	1.6	-0.9
40	90.7	87.2	76.6	84.8	87.6	90.6	24.0	20.0	1.4	-0.9
42	90.8	87.6	77.3	85.3	89.9	91.1	30.5	19.0	1.3	-0.9
44	90.9	87.4	77.6	85.4	90.3	91.4	22.0	20.0	1.2	-0.9
54	89.6	86.4	76.1	83.3	88.4	89.6	23.5	22.5	1.4	-0.9
56	89.4	86.2	75.6	83.1	88.1	89.0	23.0	22.0	1.0	-0.8
Avg.	90.5	87.2	77.1	84.8	89.7	90.8	24.4	20.7	1.3	-0.9
Std Dv	0.7	0.6	1.0	1.2	1.1	1.1	3.5	1.4	0.2	0.1
TAKEOFF										
33	88.4	85.9	76.3	80.9	87.4	89.6	16.5	16.0	2.2	-1.3
35	88.5	86.2	77.7	82.0	88.9	90.6	13.5	13.5	1.8	-1.0
37	88.6	86.3	78.0	82.4	89.1	90.8	12.5	13.0	1.7	-1.1
39	88.6	86.3	78.3	82.5	88.9	90.2	12.0	13.0	1.4	-1.1
41	88.6	86.4	78.9	83.3	89.4	90.7	12.0	13.0	1.3	-1.1
43	88.1	85.9	78.1	82.6	88.9	90.0	12.0	12.5	1.1	-1.1
53	88.3	85.9	77.0	82.2	88.4	89.7	14.5	14.5	1.3	-1.1
55	87.3	84.9	76.0	80.7	86.9	88.3	16.5	16.0	1.4	-1.2
Avg.	88.3	86.0	77.5	82.1	88.5	90.0	13.7	13.9	1.5	-1.1
Std Dv	0.4	0.5	1.0	0.9	0.9	0.8	1.9	1.4	0.4	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-2.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/17/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5   SIDELINE - 150 M. SOUTH   JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYBY - TARGET INDICATED AIRSPEED 93 KTS										
21	87.2	85.3	75.4	80.0	86.3	87.8	26.0	22.0	1.4	-1.0
22	85.9	83.3	75.2	81.5	86.7	88.5	13.0	12.5	1.8	-1.1
23	88.4	85.5	76.0	81.4	88.0	90.2	19.5	17.5	2.2	-1.2
24	87.7	85.2	75.9	82.5	87.4	88.8	15.0	14.0	1.5	-0.9
Avs.	87.3	84.8	75.6	81.3	87.1	88.8	18.4	16.5	1.8	-1.1
Std Dv	1.1	1.0	0.4	1.0	0.7	1.0	5.8	4.2	0.4	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS										
29	87.2	85.4	76.3	82.0	87.1	88.4	19.0	17.5	1.3	-0.7
30	85.6	83.3	75.8	84.5	87.3	88.4	11.0	10.5	1.1	-0.6
31	86.9	84.9	76.1	82.4	86.8	88.1	17.0	19.0	1.4	-0.8
32	84.6	82.3	74.0	81.7	85.2	86.5	14.0	13.0	1.2	-0.9
Avs.	86.1	84.0	75.6	82.7	86.6	87.8	15.2	15.0	1.3	-0.8
Std Dv	1.2	1.4	1.1	1.3	1.0	0.9	3.5	3.9	0.1	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS										
49	86.2	83.9	77.0	89.3	88.5	89.5	10.5	10.0	1.0	-0.8
50	87.2	85.4	78.0	84.8	88.6	89.6	13.0	14.0	0.9	-0.7
51	85.6	83.4	75.7	87.2	87.0	88.1	13.5	11.5	1.1	-0.8
52	86.7	84.7	76.4	83.9	87.4	88.2	14.0	14.0	0.8	-0.8
Avs.	86.4	84.3	76.8	86.3	87.9	88.8	12.7	12.4	1.0	-0.8
Std Dv	0.6	0.9	1.0	2.5	0.8	0.8	1.6	2.0	0.1	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
17	90.3	88.0	79.9	89.3	90.9	92.4	13.5	12.5	1.5	-1.0
18	88.8	86.2	80.4	95.2	92.0	92.9	8.0	8.0	1.2	-0.8
19	90.1	88.2	79.8	89.6	90.3	91.4	14.0	14.5	1.4	-0.9
20	87.6	85.4	79.5	95.1	91.2	91.8	8.5	8.0	0.6	-0.5
Avs.	89.2	86.9	79.9	92.3	91.1	92.1	11.0	10.7	1.2	-0.8
Std Dv	1.3	1.4	0.4	3.3	0.7	0.6	3.2	3.3	0.4	0.2
500 FT. FLYBY - TARGET INDICATED AIRSPEED 155 KTS										
25	90.4	88.4	81.6	93.4	92.1	93.0	11.5	12.5	1.0	-0.7
26	90.9	87.3	81.5	99.8	93.6	94.2	7.5	8.5	0.9	-0.6
27	92.4	89.8	83.5	98.1	94.7	95.8	8.5	9.0	1.2	-0.6
28	92.8	89.1	83.1	101.6	95.4	96.2	7.5	8.5	0.8	-0.6
Avs.	91.6	88.7	82.4	98.2	94.0	94.8	8.7	9.6	1.0	-0.6
Std Dv	1.1	1.0	1.0	3.5	1.4	1.5	1.9	1.9	0.2	0.1

TABLE NO. A.2-3.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/17/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
9	91.7	89.5	82.6	91.0	93.4	94.5	11.0	10.5	1.6	-1.3
10	88.7	86.0	80.2	93.2	91.9	93.1	8.0	7.5	1.5	-0.9
15	91.6	89.7	82.9	91.1	93.3	94.7	11.0	10.0	1.4	-1.0
16	90.0	86.9	81.6	96.2	93.5	95.0	7.0	6.5	1.6	-1.0
Avs.	90.5	88.0	81.8	92.y	93.0	94.3	9.2	8.6	1.5	-1.0
Std Dv	1.4	1.9	1.2	2.4	0.8	0.9	2.1	1.9	0.1	0.2
700 FT.FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
7	88.2	86.0	76.1	88.0	87.0	88.8	18.5	17.5	2.0	-1.1
8	86.1	83.5	77.0	93.1	89.2	90.1	9.5	9.0	0.9	-0.5
13	88.1	85.9	76.6	87.5	87.3	89.2	17.0	16.0	2.1	-1.1
14	87.4	84.8	78.0	93.8	90.2	90.9	10.0	9.5	0.7	-0.4
Avs.	87.4	85.1	76.9	90.6	88.4	89.7	13.7	13.0	1.4	-0.8
Std Dv	1.0	1.2	0.8	3.3	1.5	0.9	4.7	4.4	0.7	0.4
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
45	83.4	81.3	72.4	90.6	83.2	84.2	15.5	15.0	0.9	-0.7
46	85.0	83.1	73.9	87.3	84.1	85.9	19.5	18.0	1.8	-1.1
47	83.9	81.4	72.2	90.9	82.9	84.1	17.5	25.0	1.3	-0.7
48	85.5	83.3	74.2	88.0	85.1	86.8	18.5	17.5	1.7	-0.9
1	86.8	84.6	74.3	86.7	85.0	86.7	21.5	20.5	1.7	-1.1
2	84.4	82.1	73.4	92.1	85.1	85.7	15.0	14.5	0.9	-0.7
3	85.8	83.8	73.7	86.9	84.9	86.6	24.0	19.0	1.8	-0.8
4	-	81.6	72.6	90.9	84.0	85.1	15.0	-	1.1	-
Avs.	85.0	82.7	73.3	89.2	84.3	85.6	18.3	16.2	1.4	-0.9
Std Dv	1.2	1.2	0.8	2.2	0.9	1.1	3.3	7.3	0.4	0.2
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
5	82.7	81.0	69.6	85.4	79.7	81.3	31.5	32.5	1.6	-0.8
6	81.0	79.2	69.3	87.6	80.1	81.0	21.0	22.5	0.9	-0.5
11	82.8	80.5	70.0	84.9	80.4	81.4	30.0	45.5	1.1	-0.5
12	81.6	79.6	69.5	87.7	80.8	81.8	19.5	23.5	1.0	-0.4
Avs.	82.0	80.1	69.6	86.4	80.3	81.4	25.5	31.0	1.1	-0.5
Std Dv	0.9	0.8	0.3	1.5	0.4	0.3	6.1	10.7	0.3	0.2

TABLE NO. A.2-4.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/17/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
69	90.6	87.3	76.5	84.1	89.2	90.1	24.5	22.5	0.9	-0.9
70	89.8	86.9	75.9	83.3	88.4	90.0	23.5	22.0	1.6	-0.8
Avs.	90.2	87.1	76.2	83.7	88.8	90.1	24.0	22.2	1.3	-0.8
Std Dv	0.5	0.3	0.4	0.6	0.6	0.1	0.7	0.4	0.5	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 93 KTS										
61	85.6	83.5	75.2	82.4	86.6	88.0	17.0	15.5	1.3	-0.9
62	87.8	85.6	75.7	81.7	86.7	87.9	18.0	18.0	1.2	-0.7
63	85.5	83.2	74.2	81.8	86.0	86.9	14.5	14.0	1.0	-0.6
64	88.0	85.9	75.3	82.6	86.8	88.1	26.0	21.0	1.2	-0.7
Avs.	86.7	84.5	75.1	82.1	86.6	87.7	18.9	17.1	1.2	-0.7
Std Dv	1.4	1.4	0.6	0.4	0.4	0.5	5.0	3.1	0.2	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
57	88.3	85.9	78.9	95.2	90.4	91.2	10.0	10.5	0.9	-0.7
58	90.7	88.6	80.0	92.7	91.7	92.8	12.5	12.0	1.3	-0.5
59	88.9	86.4	80.0	95.1	91.7	92.5	8.5	8.5	0.8	-0.7
60	91.0	89.0	80.6	92.6	91.7	92.7	14.0	14.0	1.1	-0.6
Avs.	89.7	87.5	79.9	93.9	91.4	92.3	11.2	11.2	1.0	-0.6
Std Dv	1.3	1.6	0.7	1.5	0.6	0.7	2.5	2.3	0.2	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 155 KTS										
65	89.9	87.1	81.1	97.9	92.5	93.5	8.0	10.0	1.0	-0.6
66	92.5	90.1	82.2	97.4	94.1	95.4	10.5	10.5	1.3	-0.6
67	90.2	87.3	81.0	98.4	92.6	93.6	9.0	10.0	0.9	-0.7
68	91.5	89.0	81.9	96.5	92.9	94.7	10.0	10.5	1.8	-0.8
Avs.	91.0	88.4	81.6	97.5	93.1	94.3	9.4	10.2	1.3	-0.7
Std Dv	1.2	1.4	0.6	0.8	0.7	0.9	1.1	0.3	0.4	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-1.5G

SIKORSKY S-76 SPIRIT HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
1/12/81

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
34	94.2	91.4	83.1	89.9	95.1	95.9	16.0	16.5	0.9	-0.3
36	93.0	89.7	80.9	86.4	92.5	94.1	16.5	16.5	1.6	-0.8
40	95.1	91.7	81.9	90.2	94.2	95.4	19.5	19.5	1.2	-0.5
42	95.0	91.9	82.4	90.4	94.6	96.1	19.0	18.5	1.4	-0.5
44	94.7	91.8	82.8	89.9	94.8	95.5	18.5	18.0	0.7	-0.2
54	94.1	91.2	81.0	88.8	93.1	93.9	23.0	23.0	1.0	-0.3
56	94.0	90.7	80.8	88.4	93.4	94.2	22.0	21.5	0.8	-0.3
Avs.	94.3	91.2	81.8	89.1	94.0	95.0	19.2	19.1	1.1	-0.4
Std Dv	0.7	0.8	1.0	1.4	1.0	0.9	2.6	2.5	0.3	0.2
TAKEOFF										
33	93.7	91.1	81.6	85.5	92.7	94.8	15.5	15.5	2.2	-1.3
35	94.4	91.7	83.9	86.8	93.9	96.1	11.5	13.5	2.4	-1.4
37	94.4	91.8	83.8	86.7	94.1	96.1	12.5	13.0	2.1	-1.3
39	94.5	92.1	84.9	87.7	95.0	96.0	11.5	13.0	2.1	-1.2
41	94.4	92.1	85.2	87.9	95.2	96.6	10.0	11.5	2.2	-1.2
43	94.1	91.6	84.4	87.2	94.5	95.9	10.5	12.0	2.2	-1.3
53	94.2	91.4	82.5	85.8	94.0	95.9	13.0	13.5	1.9	-1.4
55	92.8	90.3	81.9	85.3	92.6	94.8	13.5	14.0	2.1	-1.3
Avs.	94.1	91.5	83.5	86.6	94.0	95.8	12.2	13.2	2.2	-1.3
Std Dv	0.6	0.6	1.3	1.0	0.9	0.6	1.8	1.2	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-2.5G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/ 5/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
21	91.9	89.4	79.9	84.9	91.1	92.2	18.0	17.5	1.1	-0.7
22	90.3	88.2	79.9	84.7	90.6	92.2	12.5	12.5	1.6	-0.8
23	92.7	89.8	80.7	86.2	92.8	94.3	15.0	14.5	1.5	-0.7
24	92.0	89.7	81.0	85.6	92.1	93.3	13.5	13.5	1.2	-0.5
Avs.	91.7	89.3	80.4	85.3	91.7	93.0	14.7	14.5	1.3	-0.7
Std Dv	1.0	0.7	0.6	0.7	1.0	1.0	2.4	2.2	0.3	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
29	92.0	89.5	81.2	86.4	92.4	94.0	13.5	12.5	1.4	-0.9
30	90.4	88.2	81.2	86.3	92.4	93.5	10.0	10.0	1.1	-0.6
31	91.6	89.2	80.9	86.4	92.1	93.7	14.0	13.5	1.5	-1.0
32	89.4	87.5	79.6	84.0	90.4	91.4	12.5	13.0	1.0	-0.7
Avs.	90.9	88.6	80.7	85.8	91.8	93.1	12.5	12.2	1.2	-0.8
Std Dv	1.2	0.9	0.8	1.2	1.0	1.2	1.8	1.6	0.2	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
49	91.7	89.7	83.2	91.0	94.6	95.5	9.5	9.5	0.8	-0.4
50	93.4	90.9	83.4	89.2	94.6	96.2	12.5	11.0	1.6	-0.9
51	91.1	89.0	82.2	88.7	93.1	94.3	10.5	11.0	1.2	-0.7
52	92.6	89.9	81.8	87.9	93.1	94.8	12.5	12.0	1.6	-0.9
Avs.	92.2	89.9	82.7	89.2	93.9	95.2	11.2	10.9	1.3	-0.7
Std Dv	1.0	0.8	0.8	1.3	0.9	0.8	1.5	1.0	0.4	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
17	95.0	92.3	84.5	90.9	95.8	97.1	12.0	12.0	1.7	-0.9
18	93.7	91.2	85.6	96.2	97.0	98.0	7.5	7.5	1.0	-0.7
19	94.7	92.3	84.5	91.1	95.3	96.7	13.0	12.5	1.5	-1.0
20	92.6	90.3	84.5	95.8	95.7	96.7	8.0	8.5	1.0	-0.5
Avs.	94.0	91.5	84.8	93.5	96.0	97.1	10.1	10.1	1.3	-0.8
Std Dv	1.1	1.0	0.5	2.9	0.7	0.6	2.8	2.5	0.4	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
25	95.4	93.0	86.5	94.8	97.2	98.2	10.0	10.5	1.0	-0.8
26	95.1	92.0	86.8	101.3	98.4	98.9	6.5	8.5	0.4	-0.2
27	97.1	94.3	88.1	99.5	99.5	100.6	8.0	8.5	1.1	-0.6
28	96.8	93.8	88.3	102.5	100.3	100.8	7.0	7.5	0.5	-0.3
Avs.	96.1	93.3	87.4	99.5	98.9	99.6	7.9	8.7	0.8	-0.5
Std Dv	1.0	1.0	0.9	3.4	1.3	1.3	1.5	1.3	0.3	0.3

TABLE NO.A.2-3.5G

SIKORSKY S-76 SPIRIT HELICOPTER
SUMMARY NOISE LEVEL DATA
AS MEASURED *

DOT/TSC
1/12/81

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 23,1980

300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
9		----------		NO DATA		----------				
10		----------		NO DATA		----------				
15	96.4	93.6	87.4	92.4	98.6	100.0	8.5	8.5	1.7	-1.1
16	94.9	92.0	87.0	96.5	98.5	99.5	6.0	6.5	1.1	-0.6
Avs.	95.6	92.8	87.2	94.4	98.5	99.7	7.2	7.5	1.4	-0.9
Std Dv	1.0	1.2	0.2	2.9	0.1	0.3	1.8	1.4	0.4	0.3

700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
7	92.1	89.8	80.7	89.2	91.6	93.1	16.0	15.0	1.6	-0.7
8	90.4	88.1	81.4	94.0	92.9	93.6	9.5	9.5	0.7	-0.3
13	92.4	90.1	81.5	89.0	92.6	93.9	15.0	14.5	1.1	-0.7
14	92.2	89.8	83.3	95.4	95.0	95.7	9.0	9.0	0.9	-0.3
Avs.	91.8	89.4	81.7	91.9	93.0	94.1	12.4	12.0	1.1	-0.5
Std Dv	0.9	0.9	1.1	3.3	1.4	1.1	3.6	3.2	0.4	0.3

1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
45	88.5	86.6	78.4	91.9	89.4	89.9	13.0	14.0	0.6	-0.4
46	89.9	88.0	79.1	89.5	89.6	91.2	17.5	16.0	1.6	-0.7
47	88.4	86.7	77.7	92.3	88.4	89.3	16.0	17.5	0.8	-0.4
48	90.2	88.1	79.6	89.9	90.7	92.0	16.5	15.5	1.3	-0.6
1	90.6	88.5	78.9	88.1	89.7	91.0	19.0	18.0	1.3	-0.6
2	89.1	86.9	78.6	93.2	89.8	90.8	13.0	13.0	1.0	-0.3
3	90.0	87.9	78.7	88.7	89.9	91.1	18.0	16.5	1.1	-0.7
4	88.1	86.2	77.8	91.9	88.6	89.5	14.5	14.5	1.1	-0.4
Avs.	89.4	87.4	78.6	90.7	89.5	90.6	15.9	15.6	1.1	-0.5
Std Dv	0.9	0.9	0.6	1.9	0.7	0.9	2.3	1.7	0.3	0.1

1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
5	86.4	84.8	74.1	86.7	84.3	85.5	24.5	26.0	1.2	-0.5
6	85.2	83.9	74.5	88.3	85.0	85.6	19.0	19.0	0.6	-0.2
11	86.1	84.4	74.5	86.1	85.3	86.4	21.5	25.0	1.1	-0.4
12	85.5	83.9	74.3	88.3	84.9	85.7	18.0	18.5	1.3	-0.2
Avs.	85.8	84.2	74.3	87.4	84.9	85.8	20.7	22.1	1.0	-0.3
Std Dv	0.5	0.4	0.2	1.1	0.4	0.4	2.9	3.9	0.3	0.1

TABLE NO. A.2-4.5G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/12/81

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
69	94.2	91.0	81.3	87.8	93.8	94.6	23.5	22.0	1.1	-0.5
70	94.1	90.9	80.1	87.3	93.1	93.6	23.0	23.0	1.3	-0.5
Avs.	94.2	91.0	80.7	87.5	93.5	94.1	23.2	22.5	1.2	-0.5
Std Dv	0.1	0.1	0.9	0.3	0.5	0.7	0.4	0.7	0.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
61	91.7	89.0	81.3	85.6	92.9	94.2	15.0	15.0	1.2	-0.6
62	93.5	90.4	81.0	86.2	92.6	94.3	17.0	16.5	1.7	-0.8
63	91.1	88.5	79.5	85.4	91.5	92.3	14.0	14.0	0.8	-0.5
64	93.1	90.0	80.4	86.4	92.7	93.7	19.0	17.5	1.0	-0.6
Avs.	92.3	89.5	80.5	85.9	92.4	93.6	16.2	15.7	1.2	-0.6
Std Dv	1.1	0.9	0.8	0.5	0.7	0.9	2.2	1.6	0.4	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
57	94.2	91.5	84.7	96.4	96.8	97.6	9.5	9.5	0.8	-0.5
58	-	92.8	84.9	94.4	97.5	98.4	12.0	-	1.0	-
59	94.3	91.5	85.0	96.7	97.0	97.7	8.5	9.0	0.7	-0.4
60	96.3	93.1	85.6	94.4	97.5	98.9	12.5	11.5	1.7	-0.8
Avs.	94.9	92.2	85.1	95.5	97.2	98.1	10.6	7.5	1.0	-0.6
Std Dv	1.2	0.8	0.3	1.2	0.3	0.6	1.9	5.1	0.4	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
65	95.1	92.1	86.6	97.9	98.2	99.1	7.0	8.5	1.0	-0.6
66	-	94.8	87.9	98.8	100.4	101.4	10.0	-	1.0	-
67	-	92.7	87.1	99.0	99.0	99.8	7.0	-	0.8	-
68	97.3	93.7	86.7	97.7	99.3	100.1	10.0	9.5	0.8	-0.6
Avs.	96.2	93.3	87.1	98.3	99.2	100.1	8.5	4.5	0.9	-0.6
Std Dv	1.6	1.2	0.6	0.7	0.9	0.9	1.7	5.2	0.1	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-1.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/ 3/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
34	87.3	85.3	74.5	80.5	85.5	86.8	28.0	27.0	1.3	-0.5
36	87.9	85.6	76.5	81.9	87.6	89.4	29.5	25.5	1.9	-0.6
40	87.5	85.2	76.6	80.9	86.6	88.3	26.0	26.0	1.7	-0.5
42	83.2	81.2	72.3	76.4	82.3	83.7	22.5	23.5	1.7	-0.5
44	88.9	86.7	77.2	82.0	87.2	88.7	21.0	22.5	1.5	-0.7
54	86.6	84.5	75.3	80.6	86.2	87.2	24.0	24.0	1.0	-0.5
56	86.9	84.9	74.8	79.3	84.7	86.4	30.0	30.0	2.5	-0.5
Avg.	86.9	84.8	75.3	80.2	85.7	87.2	25.9	25.5	1.6	-0.5
Std Dv	1.8	1.7	1.7	1.9	1.8	1.9	3.5	2.5	0.5	0.1
TAKEOFF										
33	-	84.3	74.1	79.8	85.0	87.1	20.0	-	2.0	-
35	88.1	85.6	75.6	80.6	85.7	87.5	23.0	23.0	1.7	-1.5
37	-	85.0	75.3	80.7	85.9	87.5	22.0	-	1.7	-
39	87.9	85.2	74.5	81.0	85.0	86.7	24.5	24.0	1.9	-1.4
41	87.9	85.1	74.1	80.9	85.3	87.7	22.0	21.5	2.5	-1.5
43	87.5	84.8	74.2	81.2	84.8	87.3	24.5	22.0	2.6	-1.4
53	87.7	85.0	73.6	80.2	85.6	87.9	30.0	22.0	2.2	-1.5
55	87.1	84.2	72.7	79.5	84.5	86.9	25.5	23.5	2.7	-1.6
Avg.	87.7	84.9	74.3	80.5	85.2	87.3	23.9	17.0	2.2	-1.5
Std Dv	0.4	0.5	0.9	0.6	0.5	0.4	3.0	10.5	0.4	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.2-2.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/ 3/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 264 M. NORTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
21	84.0	82.3	70.7	78.3	81.1	82.5	29.0	28.5	1.6	-0.7
22	84.2	82.3	71.8	77.6	82.8	84.2	24.0	20.0	1.4	-0.7
23	82.4	80.8	70.3	76.3	80.6	81.8	27.5	27.5	1.1	-0.8
24	83.0	80.9	70.1	77.1	80.9	82.5	24.0	23.5	1.5	-0.8
Avg.	83.4	81.6	70.7	77.3	81.4	82.7	26.1	24.9	1.4	-0.8
Std Dv	0.9	0.9	0.8	0.9	1.0	1.0	2.5	3.9	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
29	83.6	81.6	71.6	77.9	82.1	83.6	20.5	20.5	1.6	-0.7
30	84.1	82.3	72.7	79.6	82.8	84.7	19.0	18.5	2.0	-1.0
31	83.1	81.3	71.5	78.1	81.9	83.2	20.5	23.0	1.5	-0.6
32	84.5	82.5	73.0	79.4	83.0	84.2	19.5	21.0	1.5	-1.1
Avg.	83.8	81.9	72.2	78.7	82.5	83.9	19.9	20.7	1.6	-0.9
Std Dv	0.6	0.6	0.7	0.9	0.5	0.7	0.7	1.8	0.2	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
49	86.4	84.7	76.4	83.0	86.9	88.3	14.0	13.5	1.4	-0.7
50	84.8	82.7	74.1	82.8	85.0	86.4	16.0	15.5	1.4	-0.8
51	86.9	85.1	75.9	82.7	86.2	87.8	18.5	18.0	1.5	-0.9
52	84.4	82.5	73.5	84.7	84.1	85.2	17.5	17.5	1.4	-0.6
Avg.	85.6	83.7	75.0	83.3	85.6	86.9	16.5	16.1	1.4	-0.8
Std Dv	1.2	1.3	1.4	0.9	1.2	1.4	2.0	2.1	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
17	85.6	83.4	74.1	86.4	84.7	86.1	17.5	18.0	1.5	-0.7
18	87.9	86.2	78.9	87.4	88.8	89.9	12.5	14.5	1.1	-1.0
19	86.3	84.2	75.6	88.4	86.1	87.7	15.5	16.0	1.6	-0.8
20	87.1	85.6	78.5	87.1	88.3	89.8	12.5	13.0	1.5	-0.9
Avg.	86.7	84.8	76.8	87.4	87.0	88.4	14.5	15.4	1.4	-0.9
Std Dv	1.0	1.3	2.3	0.8	1.9	1.8	2.4	2.1	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
25	88.4	85.6	77.5	92.9	88.4	90.1	13.0	14.5	1.8	-0.9
26	88.7	86.4	78.8	91.5	89.5	91.2	12.5	11.5	1.7	-1.0
27	89.9	86.4	78.6	94.2	90.6	92.0	13.0	13.0	1.4	-0.6
28	89.3	87.2	80.0	91.9	90.6	91.8	11.0	10.5	1.3	-1.0
Avg.	89.1	86.4	78.7	92.6	89.8	91.3	12.4	12.4	1.6	-0.9
Std Dv	0.7	0.7	1.0	1.2	1.0	0.8	0.9	1.7	0.3	0.2

TABLE NO. A.2-3.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/ 3/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
9	87.2	85.3	76.8	87.1	87.2	88.7	14.5	13.5	1.4	-0.7
10	88.1	86.4	80.0	86.2	89.4	90.6	10.5	12.0	1.0	-0.9
15	86.6	84.4	76.5	87.3	87.0	88.1	14.0	15.5	1.2	-0.6
16	87.7	86.0	79.3	86.6	89.4	91.1	11.5	11.0	1.7	-1.0
Avs.	87.4	85.5	78.1	86.8	88.3	89.6	12.6	13.0	1.3	-0.8
Std Dv	0.7	0.9	1.7	0.5	1.3	1.4	1.9	2.0	0.3	0.2
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
7	86.1	83.9	74.0	89.1	84.9	86.5	19.0	18.5	1.6	-0.8
8	85.4	83.9	75.1	86.0	85.1	86.8	16.0	15.0	1.9	-1.2
13	86.5	84.3	75.0	88.3	85.8	87.1	17.0	17.0	1.4	-1.0
14	-	84.6	76.2	87.4	86.2	86.9	12.5	-	0.9	-
Avs.	86.0	84.2	75.1	87.7	85.5	86.8	16.1	12.6	1.4	-1.0
Std Dv	0.5	0.3	0.9	1.3	0.6	0.3	2.7	8.5	0.4	0.2
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
45	84.5	82.8	73.9	87.5	84.1	85.1	17.0	18.0	1.6	-0.9
46	84.7	82.5	72.7	89.9	84.3	85.8	21.0	18.5	1.6	-0.8
47	85.5	83.9	74.3	87.9	84.4	86.0	18.5	18.5	2.0	-0.8
48	85.0	82.5	72.7	90.0	84.9	86.6	19.5	16.5	1.8	-1.0
1	85.5	83.3	73.4	88.5	84.2	85.3	22.0	21.0	1.1	-0.8
2	85.4	83.9	75.3	90.1	86.3	87.8	17.0	14.0	1.6	-0.8
3	85.1	82.8	72.7	87.6	84.0	85.4	23.0	22.0	1.7	-0.9
4	85.5	83.9	75.3	88.6	84.8	85.7	16.5	18.0	0.9	-1.0
Avs.	85.1	83.2	73.8	88.8	84.6	86.0	19.3	18.3	1.5	-0.9
Std Dv	0.4	0.6	1.1	1.1	0.8	0.9	2.5	2.5	0.4	0.1
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	82.2	80.4	69.4	87.2	79.6	81.1	29.0	26.0	1.9	-0.7
6	82.7	81.0	71.7	85.9	32.0	83.2	20.5	20.0	1.1	-0.9
11	82.8	80.6	70.5	86.6	81.5	82.7	21.0	25.5	1.2	-0.8
12	82.5	80.9	70.2	85.8	81.1	82.8	19.5	18.5	1.8	-0.9
Avs.	82.5	80.7	70.5	86.3	81.0	82.5	22.5	22.5	1.5	-0.8
Std Dv	0.3	0.3	1.0	0.6	1.1	0.9	4.4	3.8	0.4	0.1

TABLE NO. A.2-4.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/13/81

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 23,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
69	87.7	85.6	77.0	81.4	86.5	88.4	21.0	21.5	1.9	-0.5
70	86.9	85.1	77.1	82.7	88.2	89.5	25.0	24.5	1.3	-0.5
Avg.	87.3	85.4	77.0	82.0	87.4	88.9	23.0	23.0	1.6	-0.5
Std Dv	0.6	0.3	0.0	0.9	1.2	0.7	2.8	2.1	0.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS										
61	85.4	83.6	73.1	80.2	83.3	84.4	27.0	27.0	1.1	-0.7
62	83.8	81.9	71.2	81.4	81.8	83.1	34.0	31.0	1.5	-0.6
63	84.4	82.7	71.9	79.8	82.3	84.0	22.5	22.0	1.7	-0.7
64	83.2	81.2	70.1	81.9	80.7	81.9	27.0	27.0	1.2	-0.7
Avg.	84.2	82.4	71.6	80.8	82.0	83.4	27.6	26.7	1.4	-0.7
Std Dv	0.9	1.0	1.2	1.0	1.1	1.1	4.7	3.7	0.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
57	88.1	86.4	77.0	90.1	87.9	89.2	16.0	16.0	1.5	-0.6
58	87.1	84.5	76.4	92.2	87.4	88.8	14.5	15.0	1.4	-0.7
59	88.8	86.9	78.7	90.2	89.4	90.4	13.0	16.5	1.2	-1.0
60	86.8	84.1	75.4	92.6	86.2	87.7	16.0	15.5	1.4	-0.5
Avg.	87.7	85.5	76.8	91.3	87.7	89.0	14.9	15.7	1.4	-0.7
Std Dv	0.9	1.4	1.4	1.3	1.3	1.1	1.4	0.6	0.1	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS										
65	90.8	88.5	80.9	94.2	91.7	93.5	12.0	12.5	2.0	-0.8
66	89.3	85.8	78.7	95.5	90.0	90.8	12.0	17.5	0.8	-0.6
67	90.8	88.1	79.9	94.2	90.8	92.4	13.0	16.5	1.6	-1.0
68	-	86.0	78.4	96.2	89.6	91.0	12.0	-	1.6	-
Avg.	90.3	87.1	79.4	95.0	90.5	91.9	12.2	11.6	1.5	-0.8
Std Dv	0.8	1.4	1.2	1.0	1.0	1.3	0.5	8.0	0.5	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.3-1.1

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
10/15/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
24	99.1	97.2	89.3	94.9	100.8	101.6	17.0	17.5	0.8	-0.7
26	98.8	96.7	86.8	92.9	98.1	99.3	26.0	21.5	1.3	-0.8
28	99.1	97.0	88.7	95.4	100.4	101.1	14.5	14.0	0.7	-0.5
32	98.9	96.4	87.1	94.5	98.2	99.3	21.0	17.0	1.1	-1.1
34	99.2	96.8	87.6	95.7	99.5	100.8	19.0	18.0	1.3	-1.0
36	97.9	95.7	86.8	93.9	97.9	98.6	17.5	17.5	0.9	-0.9
38	98.5	95.9	88.3	93.9	99.0	100.8	15.0	15.0	1.9	-1.1
40	98.5	96.2	88.5	94.7	99.8	101.2	12.0	11.5	1.4	-0.9
64	96.9	94.2	87.5	95.0	99.3	100.4	11.0	11.0	1.1	-0.9
Avg.	98.6	96.2	87.9	94.5	99.2	100.3	17.0	15.9	1.2	-0.9
Std Dv	0.7	0.9	0.9	0.9	1.0	1.0	4.6	3.4	0.3	0.2
TAKEOFF										
23	93.7	90.6	83.8	89.1	96.1	97.4	11.5	10.0	1.3	-1.1
25	96.0	92.2	87.0	90.7	99.5	101.0	7.5	7.0	1.3	-1.3
27	96.2	92.8	88.1	91.3	100.0	101.5	7.0	6.5	1.3	-1.3
29	94.8	91.3	85.3	89.3	97.8	99.2	8.5	7.5	1.2	-1.2
31	93.2	90.0	84.4	89.4	96.1	97.7	8.0	7.5	1.6	-1.4
33	94.5	90.9	85.4	90.0	97.8	99.5	8.0	7.0	1.7	-1.6
35	94.5	91.1	86.0	91.1	97.7	99.7	7.0	6.0	2.0	-1.5
37	94.0	90.4	84.5	89.2	96.5	98.1	8.5	8.0	1.6	-1.6
39	94.1	90.4	84.5	89.5	97.1	98.8	9.0	7.0	1.7	-1.5
41	93.7	90.1	84.6	88.6	97.0	98.4	8.0	7.0	1.9	-1.5
Avg.	94.5	91.0	85.4	89.8	97.6	99.1	8.3	7.3	1.6	-1.4
Std Dv	1.0	0.9	1.3	0.9	1.3	1.4	1.3	1.1	0.3	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.3-2.1

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
10/15/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS										
21	89.4	86.0	77.3	86.6	89.9	92.2	17.0	14.5	2.3	-1.3
22	89.1	86.0	77.6	87.1	90.4	92.3	21.5	16.0	1.9	-1.2
46	89.0	85.7	78.1	86.5	90.5	92.4	14.5	13.0	2.0	-1.2
47	88.7	85.8	76.4	85.6	89.1	91.3	19.0	14.0	2.4	-1.3
Avs.	89.0	85.8	77.3	86.4	90.0	92.1	18.0	14.4	2.1	-1.2
Std Dv	0.3	0.2	0.7	0.6	0.6	0.5	3.0	1.2	0.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS										
51	89.2	86.1	77.8	86.3	89.7	91.7	15.5	13.0	2.0	-1.5
52	90.1	86.9	78.2	87.7	90.2	92.2	17.5	13.5	2.0	-1.4
53	89.2	86.0	77.7	86.2	89.7	91.7	14.5	13.5	2.0	-1.5
56	90.5	87.4	78.4	87.3	90.8	92.9	23.0	15.0	2.0	-1.4
Avs.	89.7	86.6	78.0	86.9	90.1	92.1	17.6	13.7	2.0	-1.4
Std Dv	0.6	0.7	0.3	0.7	0.5	0.5	3.8	0.9	0.0	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS										
54	91.5	88.1	79.4	88.0	91.4	93.6	14.5	14.0	2.2	-1.6
55	91.1	88.1	79.1	87.2	90.8	92.7	19.5	18.5	1.9	-1.6
57	90.2	87.1	77.8	86.2	89.5	91.4	17.5	15.0	1.9	-1.6
58	90.5	87.2	78.1	87.2	90.6	92.6	17.0	14.5	2.0	-1.6
Avs.	90.8	87.6	78.6	87.2	90.6	92.6	17.1	15.5	2.0	-1.6
Std Dv	0.6	0.5	0.7	0.8	0.8	0.9	2.1	2.0	0.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
17	91.9	88.4	80.6	88.7	91.6	94.1	14.5	14.0	2.6	-1.8
18	92.1	88.9	80.1	88.4	91.3	93.3	16.5	16.0	2.0	-1.7
19	92.3	88.8	81.7	88.7	93.0	95.0	11.0	10.0	2.0	-1.8
20	92.3	89.1	80.2	88.2	91.4	93.5	17.0	15.5	2.1	-1.6
62	92.4	89.0	81.0	89.0	92.1	94.4	13.0	12.5	2.3	-1.7
63	91.9	88.7	80.6	89.1	91.7	93.9	12.0	11.5	2.3	-1.5
Avs.	92.1	88.8	80.7	88.7	91.9	94.0	14.0	13.2	2.2	-1.7
Std Dv	0.2	0.3	0.6	0.3	0.6	0.6	2.4	2.3	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS										
48	95.2	91.8	84.2	94.4	95.5	98.2	10.5	9.5	2.7	-2.0
49	94.8	91.0	82.7	93.3	94.1	96.8	12.5	12.0	2.7	-2.0
50	95.8	92.2	85.4	94.5	96.6	99.1	10.0	9.5	2.5	-2.1
59	95.3	91.7	84.8	93.6	96.0	98.7	9.5	9.5	2.7	-2.1
60	94.5	90.8	82.7	93.3	93.7	96.2	13.5	13.5	2.5	-2.0
61	94.0	90.5	82.6	92.3	93.7	96.5	12.0	11.0	2.8	-1.9
Avs.	94.9	91.3	83.7	93.6	94.9	97.6	11.3	10.8	2.7	-2.0
Std Dv	0.6	0.6	1.2	0.8	1.3	1.2	1.6	1.7	0.1	0.0

TABLE NO. A.3-3.1

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
10/16/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
9	94.2	90.9	84.5	91.0	95.5	97.6	9.5	9.5	2.1	-1.8
10	94.9	91.4	83.8	92.2	95.4	97.2	10.5	10.0	1.9	-1.7
15	96.3	93.1	85.8	92.4	97.0	99.1	13.0	12.5	2.5	-1.7
16	96.8	93.8	86.1	93.1	97.8	99.5	12.5	9.5	1.8	-1.6
Avg.	95.6	92.3	85.1	92.2	96.4	98.3	11.4	10.4	2.1	-1.7
Std Dv	1.2	1.4	1.1	0.9	1.1	1.1	1.7	1.4	0.3	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
7	89.2	86.0	76.7	85.0	87.5	89.8	17.0	16.0	2.3	-1.8
8	89.8	87.0	76.6	85.4	88.1	90.1	22.5	22.0	2.0	-1.5
13	91.6	88.8	80.4	87.0	90.5	92.8	15.0	14.5	2.6	-1.8
14	91.5	88.6	79.0	86.4	89.7	91.9	21.0	19.0	2.2	-1.5
Avg.	90.5	87.6	78.2	85.9	88.9	91.1	18.9	17.9	2.3	-1.7
Std Dv	1.2	1.3	1.8	0.9	1.4	1.4	3.5	3.3	0.2	0.2
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
2	88.2	85.3	75.0	83.4	86.0	88.1	27.5	24.0	2.2	-1.5
3	87.9	84.6	74.5	83.7	85.8	87.9	19.5	18.5	2.2	-2.0
4	88.1	85.3	74.4	83.5	86.0	88.3	27.0	25.0	2.2	-1.5
42	88.0	85.0	76.0	84.1	86.8	88.6	23.0	23.0	2.2	-1.7
43	88.1	85.1	75.8	83.8	86.0	88.5	23.0	22.5	2.5	-1.7
44	87.0	84.1	73.5	82.2	84.4	86.7	25.0	23.5	2.3	-1.6
45	88.0	84.9	75.5	82.9	86.2	88.7	22.5	22.5	2.4	-1.8
Avg.	87.9	84.9	75.0	83.4	85.9	88.1	23.9	22.7	2.3	-1.7
Std Dv	0.4	0.4	0.9	0.7	0.8	0.7	2.8	2.1	0.1	0.2
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
5	83.8	81.0	69.5	81.1	81.5	83.6	32.5	27.0	2.1	-1.5
6	85.6	82.8	71.3	81.2	82.0	84.2	31.0	27.5	2.2	-1.5
11	85.1	82.5	71.3	81.0	81.9	84.0	32.5	30.5	2.1	-1.6
12	86.8	84.2	72.7	81.0	82.9	85.3	37.0	36.0	2.4	-1.6
Avg.	85.3	82.6	71.2	81.1	82.0	84.3	33.2	30.2	2.2	-1.5
Std Dv	1.2	1.3	1.3	0.1	0.6	0.7	2.6	4.1	0.1	0.1

TABLE NO. A.3-1.1G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/ 8/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
24	103.0	101.3	93.5	98.8	104.3	105.4	16.5	16.5	1.0	-0.5
26	102.2	100.4	90.9	96.3	101.3	102.1	20.0	26.5	0.8	-0.4
28	102.4	100.8	92.6	98.8	103.5	104.3	13.0	13.5	0.7	-0.2
32	101.9	100.1	91.0	97.2	101.8	102.5	19.5	20.5	0.7	-0.4
34	102.2	100.5	91.6	98.6	102.7	103.3	18.0	18.5	0.6	-0.5
36	101.1	99.5	90.4	96.4	101.2	102.6	17.0	17.0	1.4	-0.6
38	101.3	99.5	91.3	96.6	101.8	102.4	15.0	15.5	0.6	-0.4
40	102.4	100.6	92.6	98.1	103.5	104.9	11.5	11.0	1.3	-0.4
64	100.1	98.0	91.8	97.8	102.5	103.3	9.5	11.0	0.9	-0.4
Avs.	101.8	100.1	91.7	97.6	102.5	103.4	15.6	16.7	0.9	-0.4
Std Dv	0.9	1.0	1.0	1.0	1.1	1.2	3.6	4.9	0.3	0.1
TAKEOFF										
23	97.4	94.1	87.2	93.0	98.8	100.7	10.5	9.0	2.3	-1.1
25	99.5	96.1	90.7	95.2	102.4	104.6	7.5	6.5	2.2	-1.2
27	100.4	96.8	92.0	96.0	103.6	105.6	6.5	6.5	2.0	-1.2
29	98.7	95.1	88.9	93.5	100.7	102.6	8.5	8.5	2.1	-1.0
31	98.0	94.5	89.2	93.6	100.9	102.9	7.5	7.0	2.0	-1.2
33	98.1	94.8	89.1	93.9	101.0	103.1	8.5	7.0	2.1	-1.2
35	98.6	95.3	90.2	95.4	101.5	103.5	7.0	6.5	2.0	-1.4
37	97.9	94.5	88.8	93.1	100.4	102.5	8.0	7.0	2.1	-1.1
39	97.4	93.9	87.7	92.8	99.8	101.9	8.5	7.0	2.2	-1.2
41	97.6	94.1	88.6	92.3	100.5	102.6	8.0	6.5	2.1	-1.1
Avs.	98.4	94.9	89.2	93.9	101.0	103.0	8.0	7.1	2.1	-1.2
Std Dv	1.0	0.9	1.4	1.2	1.3	1.4	1.1	0.9	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.3-2.1G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
1/12/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS										
21	92.8	89.4	81.5	89.1	93.5	95.0	15.5	15.5	1.6	-0.9
22	92.6	89.3	80.5	89.7	93.1	94.6	21.5	18.0	1.5	-0.9
46	92.5	89.4	81.4	89.6	93.4	94.7	15.0	14.5	1.3	-0.8
47	92.0	89.2	79.7	88.5	91.8	93.5	19.5	17.5	1.7	-0.8
Avs.	92.5	89.3	80.8	89.2	92.9	94.5	17.9	16.4	1.5	-0.9
Std Dv	0.4	0.1	0.9	0.6	0.8	0.6	3.1	1.7	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS										
51	92.9	89.9	82.1	89.7	93.8	95.2	13.5	13.5	1.7	-1.0
52	93.3	90.2	82.0	90.0	94.2	95.6	17.0	13.0	1.5	-1.0
53	92.2	89.1	81.4	88.7	93.1	94.7	14.5	14.0	1.7	-1.0
56	93.4	90.2	82.4	89.6	94.6	95.8	17.0	16.5	1.3	-1.1
Avs.	93.0	89.8	82.0	89.5	93.9	95.3	15.5	14.2	1.5	-1.0
Std Dv	0.5	0.5	0.4	0.6	0.6	0.5	1.8	1.6	0.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS										
54	93.8	90.8	82.5	89.7	94.3	95.8	14.0	13.5	1.5	-1.1
55	93.6	90.6	82.2	89.7	94.0	95.6	14.0	13.0	1.5	-1.1
57	93.0	89.8	81.7	88.7	93.3	95.1	15.0	14.5	1.9	-1.2
58	93.4	90.3	81.1	89.9	93.5	95.4	17.5	14.5	1.9	-1.2
Avs.	93.5	90.4	81.9	89.5	93.8	95.5	15.1	13.9	1.7	-1.1
Std Dv	0.3	0.4	0.6	0.6	0.4	0.3	1.7	0.7	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
17	95.7	92.3	84.8	92.2	96.2	97.8	13.5	13.5	1.6	-1.3
18	95.6	92.4	83.5	91.5	95.9	97.7	18.0	15.5	1.9	-1.2
19	96.2	93.0	86.1	92.6	97.5	99.0	10.5	10.0	1.5	-1.4
20	96.0	92.8	84.3	91.8	96.4	98.1	15.0	14.5	1.7	-1.3
62	95.3	92.0	84.2	91.7	96.5	98.2	12.5	11.5	1.8	-1.3
63	94.8	91.8	84.4	91.9	95.4	97.0	11.5	11.5	1.6	-1.2
Avs.	95.6	92.4	84.6	91.9	96.3	98.0	13.5	12.7	1.6	-1.3
Std Dv	0.5	0.4	0.8	0.4	0.7	0.6	2.7	2.1	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS										
48	99.2	95.7	88.1	97.0	99.9	102.2	10.5	9.5	2.4	-1.8
49	97.9	94.5	86.6	96.1	97.9	100.1	12.0	11.5	2.5	-1.6
50	99.2	95.5	89.0	97.1	100.4	102.8	9.0	9.0	2.4	-1.8
59	98.3	94.9	87.8	96.4	99.5	101.7	9.5	9.0	2.2	-1.6
60	97.4	93.7	86.2	96.4	98.0	100.0	11.0	10.0	2.1	-1.6
61	97.6	94.2	87.0	95.9	98.1	99.8	11.5	11.5	2.3	-1.5
Avs.	98.3	94.8	87.4	96.5	99.0	101.1	10.6	10.1	2.3	-1.6
Std Dv	0.8	0.8	1.0	0.5	1.1	1.3	1.2	1.2	0.2	0.1

TABLE NO. A.3-3.1G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/ 8/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
9	98.1	94.7	88.9	95.4	100.5	101.8	9.5	9.5	1.4	-1.2
10	98.5	94.9	88.3	95.9	100.6	102.1	9.5	9.0	1.5	-1.3
15	98.8	95.3	89.2	96.1	101.1	102.5	8.0	8.0	1.4	-1.2
16	99.0	95.6	89.2	96.4	101.4	102.8	9.0	8.5	1.6	-1.3
Avg.	98.6	95.1	88.9	96.0	100.9	102.3	9.0	8.7	1.5	-1.2
Std Dv	0.4	0.4	0.5	0.4	0.4	0.4	0.7	0.6	0.1	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
7	93.5	90.4	81.5	89.2	92.7	94.4	15.5	15.0	2.3	-1.3
8	93.3	90.2	80.8	88.7	92.7	94.2	19.5	18.5	1.8	-1.1
13	94.2	91.2	83.1	90.2	94.4	95.9	14.0	13.5	1.6	-1.2
14	93.7	90.6	81.6	89.2	93.6	95.3	17.5	16.5	1.7	-1.2
Avg.	93.7	90.6	81.7	89.3	93.4	95.0	16.6	15.9	1.8	-1.2
Std Dv	0.4	0.4	0.9	0.6	0.8	0.8	2.4	2.1	0.3	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
1	-	87.0	78.7	87.8	90.0	91.5	11.5	-	1.5	-
2	91.6	88.6	78.6	86.9	90.3	92.1	26.0	24.0	1.8	-1.1
3	91.4	88.3	78.6	87.0	90.1	91.6	19.0	18.0	1.5	-1.4
4	91.7	88.8	78.1	86.6	89.7	91.4	27.5	25.5	1.8	-1.2
42	91.0	88.2	79.7	87.4	91.0	92.4	21.5	20.0	1.4	-1.2
43	91.6	88.5	79.0	87.3	90.3	92.4	17.5	22.0	2.3	-1.5
44	90.5	87.7	78.0	86.4	89.7	91.5	24.0	21.0	1.9	-1.1
45	91.3	88.3	79.6	86.5	90.8	92.3	18.5	22.5	1.5	-1.4
Avg.	91.3	88.2	78.8	87.0	90.2	91.9	20.7	19.1	1.7	-1.3
Std Dv	0.4	0.6	0.6	0.5	0.5	0.4	5.2	8.1	0.3	0.2
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
5	87.7	85.0	73.4	84.4	85.2	86.7	31.0	27.5	1.7	-1.0
6	89.1	86.3	75.2	84.9	86.8	88.5	28.5	28.0	1.6	-1.1
11	88.1	85.4	74.1	84.1	85.1	86.7	32.0	30.0	1.6	-1.1
12	89.6	86.6	75.3	84.7	86.9	88.7	36.0	34.0	1.8	-1.4
Avg.	88.6	85.8	74.5	84.5	86.0	87.7	31.9	29.9	1.7	-1.2
Std Dv	0.9	0.7	0.9	0.3	1.0	1.1	3.1	3.0	0.1	0.2

TABLE NO. A.3-1.1H

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/ 9/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H   CENTERLINE - CENTER (10 METER)   JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
24	97.3	95.5	88.0	92.3	99.3	100.1	16.0	12.5	0.7	-0.7
26	96.3	94.5	85.1	89.4	95.9	96.8	22.0	22.0	0.8	-0.7
28	96.1	94.2	86.3	91.8	97.6	98.4	13.0	12.5	0.7	-0.6
32	96.7	94.7	85.2	90.9	96.6	97.5	20.0	19.5	0.9	-0.7
34	96.5	94.7	85.4	91.5	97.3	97.9	19.0	15.5	0.6	-0.6
36	95.8	93.6	84.6	89.0	95.8	97.2	17.5	16.5	1.1	-0.8
38	96.3	94.0	86.3	90.3	97.2	98.2	14.5	14.5	1.1	-0.6
40	96.7	94.4	86.8	91.6	98.1	99.4	11.0	11.0	1.5	-0.8
64	94.0	91.5	84.8	89.8	96.3	97.4	10.0	10.5	1.0	-0.7
Avg.	96.2	94.1	85.8	90.7	97.1	98.1	15.9	14.9	0.9	-0.7
Std Dv	0.9	1.1	1.1	1.2	1.1	1.1	4.1	3.9	0.3	0.1
TAKEOFF										
23	92.0	88.3	81.9	88.0	94.3	95.9	11.0	8.5	1.6	-1.6
25	94.2	89.6	84.7	89.6	97.6	99.6	6.5	6.0	1.9	-1.6
27	95.9	91.6	87.0	90.5	99.4	101.3	6.5	6.0	1.9	-1.6
29	94.5	90.0	84.8	88.4	97.7	99.6	7.5	7.0	1.9	-1.6
31	93.9	89.4	84.2	87.9	97.2	99.0	8.0	6.5	2.1	-1.6
33	94.1	89.7	84.5	88.3	97.3	98.8	7.0	6.5	1.5	-1.6
35	94.4	90.0	85.0	89.8	97.5	99.4	6.5	6.0	2.0	-1.7
37	94.0	89.5	83.8	87.8	96.6	98.5	8.0	6.5	1.9	-1.5
39	94.2	89.4	84.3	88.1	97.7	99.4	7.5	6.5	1.7	-1.7
41	93.6	89.1	84.0	87.3	96.8	99.0	7.0	6.0	2.2	-1.6
Avg.	94.1	89.6	84.4	88.6	97.2	99.1	7.5	6.5	1.9	-1.6
Std Dv	1.0	0.8	1.3	1.0	1.3	1.3	1.3	0.8	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.3-2.1H

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/ 9/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H CENTERLINE - CENTER (10 METER) JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS										
21	86.6	83.3	75.1	82.2	87.6	89.2	16.5	15.0	1.7	-1.1
22	86.9	83.7	74.4	82.0	87.3	88.8	22.0	19.5	1.5	-1.0
46	87.2	83.9	75.6	82.7	88.2	89.7	16.5	15.0	1.4	-1.1
47	86.0	82.9	73.7	81.4	86.4	88.2	19.5	14.5	1.8	-1.1
Avs.	86.7	83.5	74.7	82.1	87.4	89.0	18.6	16.0	1.6	-1.1
Std Dv	0.5	0.4	0.8	0.6	0.7	0.6	2.7	2.3	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS										
51	86.3	83.3	75.1	83.2	87.4	88.9	15.0	13.5	1.4	-1.3
52	87.4	84.3	75.7	82.9	88.2	89.7	18.5	16.0	1.5	-1.2
53	86.5	83.3	74.7	82.1	87.2	89.0	15.5	14.5	1.8	-1.4
56	87.5	84.2	75.7	82.8	88.0	89.5	16.0	16.0	1.4	-1.3
Avs.	86.9	83.8	75.3	82.8	87.7	89.3	16.2	15.0	1.5	-1.3
Std Dv	0.6	0.5	0.5	0.5	0.5	0.4	1.6	1.2	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS										
54	88.3	85.3	76.5	84.0	88.7	90.2	15.0	14.5	1.4	-1.4
55	87.5	84.4	76.2	83.1	88.5	90.1	14.0	13.0	1.6	-1.4
57	86.9	83.8	75.6	82.9	87.9	89.4	14.0	13.0	1.6	-1.4
58	87.3	84.2	75.2	83.0	87.9	89.5	17.5	14.5	1.6	-1.2
Avs.	87.5	84.4	75.9	83.3	88.3	89.8	15.1	13.7	1.6	-1.4
Std Dv	0.6	0.7	0.6	0.5	0.4	0.4	1.7	0.9	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
17	89.4	86.2	79.6	85.4	90.2	92.6	9.0	9.5	2.7	-1.6
18	89.2	86.3	77.4	84.7	89.2	90.4	16.5	16.5	1.8	-1.4
19	89.7	86.7	78.5	85.5	90.5	92.0	12.5	11.5	1.5	-1.7
20	89.7	86.8	77.7	85.1	90.0	91.2	17.0	15.0	1.3	-1.4
62	88.6	85.7	77.2	85.3	89.0	90.4	13.0	12.5	1.6	-1.1
63	88.7	85.7	77.4	85.4	89.3	90.6	12.5	12.5	1.3	-1.4
Avs.	89.2	86.2	78.0	85.2	89.7	91.2	13.4	12.9	1.7	-1.4
Std Dv	0.5	0.5	0.9	0.3	0.6	0.9	3.0	2.5	0.5	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS										
48	92.7	89.4	82.1	91.0	93.1	95.9	9.5	9.0	2.9	-1.8
49	92.3	89.0	80.5	89.2	92.3	93.7	12.5	12.0	1.5	-1.7
50	93.1	89.8	83.0	91.1	94.1	96.7	9.5	9.5	2.6	-1.8
60	91.9	88.4	81.0	90.0	91.8	94.3	11.0	11.0	2.5	-1.7
61	91.7	88.4	81.1	89.1	92.1	94.3	9.0	9.5	3.0	-1.7
Avs.	92.3	89.0	81.5	90.0	92.7	95.0	10.3	10.2	2.5	-1.7
Std Dv	0.6	0.6	1.0	1.0	0.9	1.3	1.4	1.3	0.6	0.0

TABLE NO. A.3-3.1H

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
1/12/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H CENTERLINE - CENTER (10 METER) JUNE 24,1980

300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
9	91.8	88.5	82.4	89.1	94.1	95.6	9.0	9.0	1.5	-1.6
10		----------		NO DATA		----------				
15	91.9	88.7	82.4	89.1	94.5	95.9	9.5	8.0	1.5	-1.6
16	93.2	90.0	82.7	89.7	94.7	96.2	9.5	9.0	2.7	-1.5
Avg.	92.3	89.1	82.5	89.3	94.4	95.9	9.3	8.7	1.9	-1.6
Std Dv	0.8	0.8	0.2	0.3	0.3	0.3	0.3	0.6	0.7	0.1

700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
7	87.1	84.2	75.6	83.0	86.6	88.8	16.0	15.5	2.3	-1.5
8	87.4	85.0	74.6	82.4	86.7	88.0	24.0	19.5	1.3	-1.3
13	87.4	84.5	75.5	83.1	87.4	89.0	15.5	14.5	1.6	-1.5
14	87.5	84.8	74.7	82.6	86.4	88.2	20.5	18.0	1.8	-1.3
Avg.	87.4	84.6	75.1	82.8	86.8	88.5	19.0	16.9	1.7	-1.4
Std Dv	0.2	0.3	0.5	0.3	0.4	0.5	4.0	2.3	0.4	0.2

1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1	-	79.4	71.4	80.1	83.0	84.4	10.0	-	1.5	-
2	85.9	83.4	72.5	81.1	83.7	85.5	29.0	26.5	1.8	-1.3
3	84.6	81.9	71.6	80.6	83.5	85.0	20.0	19.0	1.5	-1.6
4	85.6	83.1	72.3	80.8	83.6	85.1	28.0	24.0	1.7	-1.2
42	85.4	82.6	73.3	81.4	84.4	85.8	22.5	22.5	1.4	-1.2
43	85.4	82.5	73.0	80.2	84.4	86.1	23.5	22.5	1.7	-1.4
44	85.2	82.4	72.1	80.7	83.6	85.4	24.0	23.0	1.8	-1.2
45	85.3	82.5	72.8	80.4	83.9	85.5	23.5	23.0	1.5	-1.5
Avg.	85.3	82.2	72.4	80.7	83.8	85.4	22.6	20.1	1.6	-1.3
Std Dv	0.4	1.2	0.7	0.4	0.5	0.5	5.8	8.4	0.2	0.1

1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
5	81.6	78.9	67.1	76.3	78.6	80.3	31.0	28.0	2.5	-0.8
6	83.6	80.7	69.1	78.3	79.9	81.8	29.0	36.0	2.5	-1.1
11	81.3	78.6	67.7	76.7	78.6	80.9	34.0	30.5	2.3	-1.2
12	83.5	80.6	68.4	77.6	79.5	81.2	39.0	43.5	1.6	-1.4
Avg.	82.5	79.7	68.1	77.2	79.1	81.1	33.2	34.5	2.2	-1.1
Std Dv	1.2	1.1	0.8	0.9	0.7	0.7	4.3	6.9	0.4	0.2

TABLE NO. A.3-1.2

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/ 8/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
24	101.0	98.7	90.9	97.0	102.0	102.9	14.5	15.0	0.9	-0.9
26	100.4	98.2	90.3	96.9	102.2	103.1	16.0	15.0	0.9	-0.7
28	101.4	99.2	91.4	98.1	103.4	104.4	13.5	12.5	1.0	-0.6
32	101.2	98.6	89.8	97.4	100.9	101.7	17.0	16.5	1.3	-0.8
34	101.4	99.1	91.2	97.4	102.8	103.6	13.5	13.5	0.8	-0.8
36	99.4	97.0	89.6	96.7	101.7	102.6	14.0	13.0	0.9	-0.6
38	100.9	98.2	90.3	97.6	101.9	103.0	14.5	14.5	1.1	-0.9
40	100.8	98.4	91.5	97.9	103.0	103.9	12.5	12.5	0.9	-0.7
64	98.6	96.0	89.1	96.2	100.5	101.2	12.0	12.5	0.7	-0.7
Avs.	100.6	98.2	90.4	97.2	102.1	103.0	14.2	13.9	1.0	-0.8
Std Dv	1.0	1.0	0.8	0.6	1.0	1.0	1.6	1.4	0.2	0.1
TAKEOFF										
23	95.8	92.4	86.7	92.1	98.8	100.6	9.0	8.0	1.8	-1.5
25	97.5	93.4	88.3	93.4	100.8	102.6	7.0	6.0	1.8	-1.6
27	98.8	94.9	90.5	95.0	102.8	104.8	6.0	5.5	2.0	-1.6
29	96.9	93.0	88.2	93.1	100.7	102.2	7.0	6.5	1.5	-1.4
31	96.4	92.6	87.8	92.8	100.5	102.1	7.5	6.0	1.6	-1.4
33	96.1	92.6	87.6	92.9	99.9	101.4	7.5	6.0	1.5	-1.5
35	96.4	92.7	87.8	93.2	100.1	101.9	7.5	6.5	1.8	-1.5
37	96.9	93.0	87.9	92.9	100.4	102.3	7.5	6.5	2.0	-1.7
39	96.5	92.9	87.6	93.0	99.8	101.4	8.0	7.0	1.6	-1.6
41	96.1	92.3	87.0	91.7	99.6	101.4	7.5	6.0	2.0	-1.5
Avs.	96.7	93.0	87.9	93.0	100.4	102.1	7.4	6.4	1.7	-1.5
Std Dv	0.9	0.7	1.0	0.9	1.0	1.1	0.8	0.7	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.3-2.2

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/ 8/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS										
21	90.3	87.1	78.8	87.0	91.5	93.4	20.5	14.5	2.0	-1.1
22	90.5	87.6	78.4	88.1	91.5	93.4	25.0	14.5	1.9	-1.1
46	90.8	87.6	78.7	88.0	91.5	93.4	20.0	15.0	2.2	-1.2
47	90.1	87.5	78.8	86.7	90.7	92.0	21.0	14.5	1.3	-1.1
Avs.	90.4	87.5	78.7	87.5	91.3	93.1	21.6	14.6	1.8	-1.1
Std Dv	0.3	0.2	0.2	0.7	0.4	0.7	2.3	0.2	0.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS										
51	90.2	87.3	77.9	87.4	90.0	91.8	21.0	15.5	1.8	-0.9
52	90.5	87.2	80.9	88.3	93.1	94.7	10.5	9.5	1.6	-1.2
53	89.8	86.7	77.6	86.3	89.6	91.4	19.0	15.5	1.9	-1.4
56	90.6	87.5	79.2	88.4	92.0	94.2	18.0	12.0	2.2	-1.4
Avs.	90.3	87.2	78.9	87.6	91.2	93.0	17.1	13.1	1.9	-1.2
Std Dv	0.4	0.3	1.5	1.0	1.7	1.7	4.6	2.9	0.2	0.3
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS										
54	92.4	89.1	79.8	88.8	92.5	94.7	18.0	17.0	2.3	-1.7
55	91.3	88.1	78.7	87.0	90.9	92.7	14.5	13.5	1.9	-1.5
57	90.6	87.3	78.7	86.4	90.2	92.2	16.0	15.0	2.3	-1.5
58	91.2	87.8	79.5	88.4	92.1	94.2	16.5	15.0	2.2	-1.5
Avs.	91.4	88.1	79.2	87.7	91.4	93.5	16.2	15.1	2.2	-1.5
Std Dv	0.7	0.7	0.6	1.1	1.0	1.2	1.4	1.4	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
17	94.1	90.9	81.8	89.5	93.2	95.2	12.5	12.0	2.0	-1.6
18	92.9	89.6	80.3	89.3	92.7	94.6	19.5	17.0	2.2	-1.6
19	93.4	89.9	82.0	89.3	92.6	95.2	12.0	12.0	2.6	-1.8
20	94.5	91.3	82.5	89.7	93.7	95.9	16.0	15.5	2.3	-1.7
62	93.5	90.4	82.1	89.7	93.4	95.6	15.0	13.0	2.2	-1.7
63	92.5	89.4	80.6	89.2	91.8	93.8	14.0	13.5	2.0	-1.5
Avs.	93.5	90.2	81.5	89.5	92.9	95.1	14.8	13.8	2.2	-1.7
Std Dv	0.7	0.8	0.9	0.2	0.7	0.7	2.7	2.0	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS										
48	95.6	92.0	84.2	94.6	95.4	97.9	11.0	10.5	2.7	-2.0
49	95.4	92.0	83.2	93.1	93.9	96.7	15.5	15.0	2.8	-1.9
50	95.9	92.2	84.1	94.5	94.9	97.7	12.5	11.5	2.8	-2.0
59	94.8	91.2	84.5	93.9	95.7	98.4	9.0	8.5	2.6	-1.8
60	95.2	91.5	83.6	94.1	94.8	97.3	13.0	12.5	2.6	-2.0
61	94.9	91.6	83.5	93.6	94.6	97.1	12.0	11.0	2.5	-1.9
Avs.	95.3	91.8	83.9	94.0	94.9	97.5	12.2	11.5	2.7	-1.9
Std Dv	0.4	0.4	0.5	0.6	0.6	0.6	2.2	2.2	0.1	0.1

TABLE NO. A.3-3.2

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/ 8/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
9	95.5	92.0	85.2	92.4	96.5	98.6	10.5	9.5	2.1	-1.7
10	96.3	92.8	84.4	93.2	96.8	98.6	11.0	10.5	1.8	-1.6
15	95.9	92.4	85.1	92.7	96.8	98.8	10.0	9.0	2.4	-1.7
16	96.3	92.6	85.6	93.4	97.3	99.3	10.5	10.0	2.0	-1.7
Avg.	96.0	92.5	85.1	92.9	96.9	98.8	10.5	9.7	2.1	-1.7
Std Dv	0.4	0.3	0.5	0.5	0.3	0.3	0.4	0.6	0.3	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
7	91.0	87.8	78.3	86.7	89.4	91.5	17.5	16.0	2.2	-1.8
8	91.3	88.3	78.5	86.9	89.9	91.9	22.0	19.0	2.2	-1.5
13	91.6	88.4	79.4	87.3	89.7	92.1	14.5	15.0	2.6	-1.8
14	91.3	88.2	78.0	86.9	90.1	92.3	22.0	20.0	2.1	-1.5
Avg.	91.3	88.2	78.6	87.0	89.8	91.9	19.0	17.5	2.3	-1.6
Std Dv	0.2	0.2	0.6	0.2	0.3	0.3	3.7	2.4	0.2	0.2
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
1	-	82.6	74.7	84.7	85.8	87.9	10.5	-	2.1	-
2	89.2	86.3	74.8	84.1	86.6	88.7	31.0	27.0	2.1	-1.5
3	88.7	85.7	75.1	84.4	85.8	88.2	25.0	20.0	2.5	-1.8
4	89.1	86.2	75.9	84.0	87.0	89.1	26.0	23.5	2.2	-1.5
42	89.4	86.3	76.9	85.0	87.5	89.7	23.5	23.0	2.3	-1.7
43	-	87.5	76.5	86.3	87.2	89.7	32.0	-	2.5	-
44	88.8	85.6	76.3	84.2	87.3	89.7	20.5	20.0	2.4	-1.7
45	88.7	85.6	76.4	84.0	87.0	89.1	21.5	21.0	2.1	-1.7
Avg.	89.0	85.7	75.8	84.6	86.8	89.0	23.7	16.8	2.3	-1.6
Std Dv	0.3	1.4	0.8	0.8	0.7	0.7	6.7	10.6	0.2	0.1
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
5	85.3	82.4	69.9	81.7	81.3	83.5	35.0	32.5	2.3	-1.6
6	86.9	84.0	72.2	82.5	83.2	85.5	31.0	28.5	2.3	-1.7
11	85.1	82.2	71.7	80.5	82.1	84.1	28.5	29.0	2.0	-1.5
12	86.7	83.8	71.4	82.4	83.3	85.5	33.5	28.0	2.2	-1.7
Avg.	86.0	83.1	71.3	81.8	82.5	84.7	32.0	29.5	2.2	-1.6
Std Dv	0.9	0.9	1.0	0.9	1.0	1.0	2.9	2.0	0.1	0.1

TABLE NO. A.3-1.3

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/ 8/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
24	98.4	96.3	85.9	93.0	97.0	98.3	21.5	20.5	1.4	-0.9
26	102.0	99.5	88.3	96.8	99.9	101.2	29.5	28.5	1.2	-0.8
28	97.7	95.3	86.1	94.2	97.5	98.5	24.5	21.5	1.1	-0.9
32	98.0	95.5	85.4	94.2	97.6	99.2	22.0	19.5	1.6	-0.9
34	99.0	96.4	86.9	94.1	97.9	99.1	19.5	20.0	1.2	-1.1
36	98.6	96.2	87.0	95.2	99.3	100.4	18.5	17.0	1.1	-0.8
38	97.8	95.5	87.4	94.6	96.3	99.4	17.0	19.5	1.1	-0.9
40	97.5	95.3	85.8	93.5	97.2	98.2	23.0	23.0	1.0	-0.9
64	95.1	92.9	84.6	93.9	96.5	97.8	17.5	13.5	1.3	-0.7
Avg.	98.2	95.9	86.4	94.4	97.9	99.1	21.4	20.3	1.2	-0.9
Std Dv	1.8	1.7	1.1	1.1	1.1	1.1	3.9	4.1	0.2	0.1
TAKEOFF										
23	93.4	90.1	83.0	89.7	95.1	96.8	11.5	9.5	1.7	-1.7
25	94.9	91.5	85.3	89.9	97.1	99.0	9.0	8.5	1.8	-1.5
27	95.0	91.6	84.8	89.2	96.7	98.9	9.5	8.0	2.3	-1.5
29	93.9	90.5	84.0	88.4	96.2	97.9	9.5	8.5	2.1	-1.4
31	93.4	90.0	83.4	87.9	95.6	97.1	10.0	8.5	1.6	-1.5
33	93.5	90.0	83.4	88.3	95.4	97.2	10.0	8.5	1.8	-1.6
35	94.2	90.9	84.4	88.8	96.4	98.2	10.0	8.0	2.1	-1.6
37	93.5	89.8	82.8	88.0	95.1	96.9	11.0	9.5	1.8	-1.5
39	93.4	89.9	83.6	88.4	95.6	97.1	9.5	8.5	1.5	-1.4
41	93.3	89.8	82.9	88.1	94.9	96.9	10.5	9.0	2.3	-1.5
Avg.	93.8	90.4	83.8	88.7	95.8	97.6	10.0	8.6	1.9	-1.5
Std Dv	0.7	0.7	0.9	0.7	0.8	0.9	0.8	0.5	0.3	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.3-2.3

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/ 8/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3　　CENTERLINE - 150 M. EAST　　JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS										
21	90.3	87.0	77.1	87.5	90.1	92.2	21.5	19.5	2.1	-1.3
22	89.6	86.5	76.5	87.6	89.4	91.0	25.0	22.5	1.7	-0.9
46	88.9	85.8	76.8	87.9	88.9	90.8	18.5	17.5	1.9	-0.9
47	88.2	85.2	75.7	85.9	88.6	90.7	19.5	17.0	2.1	-1.2
Avg.	89.3	86.1	76.6	87.3	89.2	91.2	21.1	19.1	1.9	-1.1
Std Dv	0.9	0.8	0.6	0.9	0.6	0.7	2.9	2.5	0.2	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS										
51	90.1	87.1	78.0	88.0	90.7	92.7	18.5	13.5	2.0	-1.4
52	90.3	87.4	78.0	88.7	90.1	91.9	19.5	17.0	1.8	-1.1
53	89.8	86.7	77.4	88.1	89.8	91.7	18.5	16.5	2.1	-1.4
56	90.5	87.6	78.2	88.9	90.4	92.2	20.5	15.5	1.9	-1.0
Avg.	90.2	87.2	77.9	88.4	90.2	92.1	19.2	15.6	1.9	-1.2
Std Dv	0.3	0.4	0.3	0.4	0.4	0.4	1.0	1.5	0.1	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS										
54	92.1	89.1	79.9	88.8	91.0	93.0	17.5	17.5	2.1	-1.6
55	91.5	88.5	79.3	88.6	90.4	92.3	18.0	17.5	2.0	-1.5
57	91.0	88.0	78.9	87.4	90.2	92.2	16.5	15.5	2.4	-1.5
58	90.3	87.1	77.9	88.2	90.0	91.8	17.0	14.5	1.7	-1.4
Avg.	91.2	88.2	79.0	88.2	90.4	92.3	17.2	16.2	2.1	-1.5
Std Dv	0.8	0.8	0.9	0.6	0.4	0.5	0.6	1.5	0.3	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
17	92.6	89.6	81.9	89.8	92.7	94.8	11.0	10.5	2.1	-1.7
18	92.7	89.7	80.5	89.4	91.5	93.6	17.0	16.5	2.1	-1.4
19	93.0	89.9	82.2	90.0	92.8	95.3	11.5	11.5	2.5	-1.7
20	92.7	89.8	80.6	89.7	91.8	93.6	18.0	17.5	2.1	-1.6
62	92.4	89.5	81.7	89.9	92.6	94.6	14.0	11.5	2.0	-1.4
63	92.4	89.4	80.8	90.2	91.6	93.8	15.0	14.5	2.2	-1.7
Avg.	92.6	89.6	81.3	89.8	92.2	94.3	14.4	13.7	2.2	-1.6
Std Dv	0.2	0.2	0.7	0.3	0.6	0.7	2.8	2.9	0.2	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS										
48		----------		NO DATA		----------				
49	94.7	91.5	83.1	94.2	94.1	96.4	19.0	12.5	2.3	-2.0
50	96.5	93.2	85.9	95.7	96.6	99.3	11.0	11.0	2.7	-1.9
59	95.4	92.1	84.4	94.6	95.0	97.7	11.5	11.0	2.8	-1.9
60	95.4	92.1	84.7	95.3	95.2	97.9	14.5	14.5	2.7	-1.8
61	94.5	91.3	84.2	94.2	94.8	97.3	10.5	10.0	2.4	-1.8
Avg.	95.3	92.0	84.4	94.8	95.1	97.7	13.3	11.8	2.6	-1.9
Std Dv	0.8	0.8	1.0	0.7	0.9	1.1	3.5	1.8	0.2	0.1

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TABLE NO. A.3-3.3

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
1/12/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
9	94.1	90.9	84.6	91.7	95.6	97.6	9.5	9.5	2.0	-1.7
10	95.0	92.1	84.1	92.9	95.5	97.4	13.5	10.5	2.1	-1.5
15	95.4	92.4	85.2	92.3	96.0	98.0	12.0	11.5	2.1	-1.6
16	95.7	92.7	85.1	92.9	96.5	98.3	12.0	12.0	1.9	-1.4
Avs.	95.1	92.0	84.8	92.5	95.9	97.8	11.7	10.9	2.0	-1.5
Std Dv	0.7	0.8	0.5	0.6	0.4	0.4	1.7	1.1	0.1	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
7	89.9	87.1	78.1	86.6	88.5	90.5	15.5	16.0	2.0	-1.8
8	90.2	87.5	77.3	86.2	88.1	89.9	23.5	23.5	2.0	-1.3
13	90.9	88.0	79.3	88.3	89.9	92.1	13.5	13.0	2.2	-1.8
14	90.0	87.4	77.0	86.2	87.8	89.6	23.0	22.5	1.8	-1.4
Avs.	90.3	87.5	77.9	86.8	88.6	90.5	18.9	18.7	2.0	-1.6
Std Dv	0.5	0.4	1.0	1.0	0.9	1.1	5.1	5.1	0.2	0.3
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
1	-	91.4	83.9	95.5	93.9	96.9	10.5	-	3.4	-
2	88.9	86.1	74.8	84.8	85.6	87.6	29.0	28.5	2.0	-1.4
3	87.7	84.8	76.0	85.5	85.9	88.6	19.0	18.5	2.8	-1.9
4	88.5	85.8	75.0	84.6	85.9	88.0	27.0	26.0	2.1	-1.4
42	88.8	86.0	75.8	84.5	86.1	88.2	22.0	22.0	2.2	-1.6
43	88.6	85.9	77.1	84.7	86.6	89.2	18.5	18.0	2.6	-1.8
44	87.8	85.0	76.1	83.5	86.7	89.0	19.5	19.0	2.3	-1.4
45	87.5	84.4	74.5	84.1	85.2	87.6	26.5	25.5	2.3	-1.8
Avs.	88.3	86.2	76.6	85.9	87.0	89.4	21.5	19.7	2.4	-1.6
Std Dv	0.6	2.2	3.1	3.9	2.8	3.1	6.0	8.9	0.5	0.2
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
5	81.0	79.0	69.1	78.7	78.7	81.1	28.5	28.0	2.4	-1.6
6	85.3	82.8	71.0	81.5	81.5	83.1	35.0	34.0	1.7	-1.4
11	84.7	82.0	70.1	82.9	80.6	82.4	34.0	33.5	2.2	-1.6
12	86.5	83.7	71.4	82.3	82.3	84.5	32.5	31.5	2.2	-1.6
Avs.	84.4	81.9	70.4	81.3	80.7	82.8	32.5	31.7	2.1	-1.6
Std Dv	2.4	2.1	1.0	1.9	1.6	1.4	2.9	2.7	0.3	0.1

TABLE NO. A.3-1.4

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
10/16/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE -164M. NORTH JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
24	97.1	94.2	84.9	93.1	95.9	97.4	18.5	20.0	2.1	-1.2
26	-	93.4	84.3	93.2	96.2	97.2	16.5	-	1.0	-
28	95.1	92.2	82.1	92.5	94.7	96.4	23.0	21.0	2.0	-1.0
32	93.8	90.8	80.4	92.2	92.9	93.9	28.5	23.5	1.1	-1.0
34	94.5	91.4	81.6	92.1	94.0	95.9	23.0	21.5	2.0	-1.0
36	96.2	93.6	83.5	91.5	94.4	95.9	28.0	27.5	2.6	-1.2
38	93.4	90.5	80.1	90.2	91.4	93.1	29.0	28.0	1.7	-1.1
40	95.9	93.2	84.0	92.3	94.8	97.1	18.0	15.0	2.3	-1.1
64	95.1	91.9	84.4	92.2	95.5	97.9	11.0	10.5	2.3	-1.5
Avs.	95.1	92.3	82.8	92.2	94.4	96.1	21.7	18.6	1.9	-1.1
Std Dv	1.3	1.3	1.8	0.9	1.5	1.6	6.2	8.9	0.6	0.2
TAKEOFF										
23	92.5	89.3	80.8	90.4	92.5	95.1	15.0	14.0	2.6	-1.5
25	93.3	89.8	81.5	90.4	93.2	95.7	14.5	12.5	2.5	-1.3
27	93.0	89.3	81.2	90.7	93.5	95.8	13.0	12.0	2.3	-1.4
29	-	89.3	81.2	90.7	92.7	95.1	13.0	-	2.4	-
31	92.7	89.6	80.6	90.1	92.2	94.6	15.5	14.0	2.5	-1.3
33	92.7	89.5	80.5	90.1	92.4	94.8	15.5	14.0	2.4	-1.4
35	92.7	89.4	80.8	89.5	92.1	94.3	14.5	13.5	2.4	-1.3
37	93.0	89.8	80.9	90.3	92.6	95.1	15.5	13.5	2.5	-1.4
39	92.6	89.5	80.9	90.2	92.7	94.9	17.0	14.0	2.3	-1.3
41	92.7	89.3	80.7	90.3	92.9	95.3	14.5	13.0	2.4	-1.4
Avs.	92.8	89.5	80.9	90.3	92.7	95.1	14.8	12.0	2.4	-1.4
Std Dv	0.3	0.2	0.3	0.4	0.4	0.5	1.2	4.3	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.3-2.4

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
10/16/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE -164M. NORTH JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYBY - TARGET INDICATED AIRSPEED 87 KTS										
21	87.7	84.8	74.3	83.9	86.2	87.2	26.5	27.0	1.0	-1.0
22	87.3	84.2	73.8	89.0	85.6	86.9	26.5	30.0	1.2	-0.9
46	86.4	83.7	75.1	88.3	86.4	87.1	23.0	23.5	0.7	-0.8
47	87.6	85.1	75.2	82.8	85.9	87.2	34.0	26.5	1.6	-0.9
Avs.	87.2	84.5	74.6	86.0	86.1	87.1	27.5	26.7	1.1	-0.9
Std Dv	0.6	0.6	0.7	3.1	0.3	0.2	4.6	2.7	0.4	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 102 KTS										
51	88.7	85.5	75.3	86.6	87.4	88.8	23.0	21.5	1.9	-1.2
52		----------		NO DATA		----------				
53	88.1	85.0	74.8	86.6	87.1	88.3	24.5	24.0	1.2	-1.2
56	87.2	84.0	75.2	88.9	87.2	88.3	23.5	22.5	1.1	-1.1
Avs.	88.0	84.8	75.1	87.4	87.2	88.5	23.7	22.7	1.4	-1.1
Std Dv	0.8	0.8	0.2	1.3	0.2	0.3	0.8	1.3	0.4	0.1
500 FT.FLYBY - TARGET INDICATED AIRSPEED 116 KTS										
54	89.4	86.1	75.6	89.5	87.6	88.9	24.0	24.0	2.2	-1.3
55	89.3	86.2	76.6	88.7	88.4	89.7	26.5	26.0	1.3	-1.1
57	89.7	86.7	76.0	88.4	87.9	89.2	23.0	21.5	1.2	-1.1
58	88.0	84.7	75.3	89.2	87.3	88.7	19.5	20.0	1.6	-1.1
Avs.	89.1	85.9	75.9	88.9	87.8	89.1	23.2	22.9	1.6	-1.2
Std Dv	0.8	0.8	0.6	0.5	0.5	0.4	2.9	2.7	0.4	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS										
17	90.4	87.7	79.3	91.6	90.3	92.5	17.5	17.5	2.2	-1.3
18	91.0	88.0	77.6	91.2	89.1	91.3	23.5	21.0	2.2	-1.3
19	90.4	87.7	78.3	91.2	89.2	90.2	20.5	20.0	1.1	-1.3
20	91.9	88.7	79.8	92.2	90.3	92.6	25.5	25.5	2.3	-1.5
62	90.4	87.1	76.8	91.9	88.2	90.1	18.5	18.5	2.3	-1.5
63	90.1	87.3	78.0	92.6	89.6	90.5	19.0	19.0	0.9	-1.1
Avs.	90.7	87.7	78.3	91.8	89.4	91.2	20.7	20.2	1.8	-1.3
Std Dv	0.7	0.6	1.1	0.6	0.8	1.1	3.1	2.8	0.6	0.2
500 FT. FLYBY - TARGET INDICATED AIRSPEED 145 KTS										
48	93.9	89.9	81.1	96.9	92.9	95.7	14.5	13.5	2.8	-1.8
49	92.9	89.7	80.2	94.3	91.8	93.3	18.0	17.5	2.6	-1.4
50	94.3	90.3	81.2	97.7	93.5	96.2	19.0	17.5	2.7	-1.8
59	92.8	89.6	80.0	96.2	92.1	93.0	18.0	18.0	1.3	-1.2
60	93.5	89.5	81.9	97.0	92.6	95.5	14.5	14.0	2.9	-1.8
61	92.7	89.7	79.9	95.1	91.5	93.1	19.5	18.5	1.6	-1.3
Avs.	93.3	89.8	80.7	96.2	92.4	94.5	17.2	16.5	2.3	-1.5
Std Dv	0.6	0.3	0.8	1.3	0.7	1.5	2.2	2.2	0.7	0.3

TABLE NO. A.3-3.4

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
10/16/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE -164M. NORTH JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS										
9	91.2	88.5	79.8	92.1	90.8	91.5	17.0	18.0	1.0	-0.9
10	92.0	88.5	79.2	94.7	91.0	92.6	18.0	17.5	1.7	-1.4
15	90.7	87.8	79.0	91.4	90.5	91.7	15.0	15.0	2.2	-0.9
16	89.9	86.9	77.8	89.2	89.5	91.7	17.0	16.5	2.2	-1.3
Avg.	91.0	87.9	79.0	91.9	90.4	91.9	16.7	16.7	1.8	-1.1
Std Dv	0.9	0.8	0.8	2.3	0.7	0.5	1.3	1.3	0.6	0.3
700 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS										
7	89.6	86.8	76.7	89.5	88.6	90.1	20.5	20.0	1.5	-1.4
8	90.4	87.4	76.6	90.7	87.9	89.5	24.5	23.0	1.6	-1.2
13	89.7	87.0	76.7	90.5	88.0	89.4	23.0	22.5	1.4	-1.4
14	89.9	86.9	77.3	89.8	87.2	89.1	24.5	25.0	2.2	-1.3
Avg.	89.9	87.0	76.8	90.1	87.9	89.5	23.1	22.6	1.7	-1.3
Std Dv	0.4	0.3	0.3	0.5	0.6	0.4	1.9	2.1	0.4	0.1
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS										
2	89.6	86.7	74.8	88.6	86.0	88.1	33.5	31.5	2.2	-1.4
3	88.1	85.2	75.2	87.4	87.1	89.1	24.5	20.5	1.9	-1.5
4	88.9	86.1	73.9	88.4	85.2	87.1	35.5	30.5	2.0	-1.2
42	88.2	85.2	77.6	88.4	86.9	89.3	19.5	25.5	2.4	-1.4
43	87.7	84.6	75.2	87.3	87.4	89.4	22.5	19.5	2.0	-1.4
44	88.0	85.2	73.4	87.2	85.0	87.0	33.0	26.5	2.1	-1.4
45	87.3	84.2	74.8	86.8	86.9	89.2	19.5	17.5	2.3	-1.4
Avg.	88.2	85.3	75.0	87.7	86.3	88.4	26.9	24.5	2.1	-1.4
Std Dv	0.8	0.8	1.3	0.7	1.0	1.0	6.9	5.5	0.2	0.1
1500 FT.FLYBY - TARGET INDICATED AIRSPEED 130 KTS										
5	84.9	82.3	71.5	85.0	83.5	85.6	35.5	25.0	2.1	-1.4
6	87.8	84.8	72.6	87.2	84.3	86.5	40.0	33.5	2.2	-1.5
11	84.8	82.2	70.9	84.2	83.2	85.7	39.5	25.0	2.5	-1.3
12	87.2	84.3	72.4	86.4	83.4	85.6	35.5	29.5	2.2	-1.5
Avg.	86.2	83.4	71.8	85.7	83.6	85.9	37.6	28.2	2.3	-1.4
Std Dv	1.6	1.3	0.8	1.3	0.5	0.4	2.5	4.1	0.2	0.1

TABLE NO. A.3-1.5

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
11/18/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
24	93.6	90.7	79.2	87.6	91.8	92.9	34.0	33.5	1.1	-1.1
26	94.9	92.5	84.3	87.8	93.9	95.7	23.0	24.0	1.7	-1.1
28	95.2	92.9	82.2	88.8	93.3	94.5	28.5	21.5	1.3	-1.1
32	95.4	92.9	82.6	87.9	93.1	95.1	26.5	26.5	2.0	-1.3
34	94.7	92.3	82.5	87.7	93.1	94.6	21.0	22.0	1.5	-1.0
36	93.1	90.5	79.3	85.9	90.9	91.9	32.5	29.0	1.0	-0.9
38	93.6	91.0	82.1	87.9	93.3	95.0	25.5	22.5	1.6	-1.1
40	92.8	90.0	78.8	87.1	90.5	91.7	42.0	39.0	1.2	-1.1
64	90.2	86.9	77.9	86.5	89.9	91.2	21.5	20.0	1.3	-0.9
Avs.	93.7	91.1	81.0	87.5	92.2	93.6	28.3	26.4	1.4	-1.1
Std Dv	1.6	1.9	2.2	0.9	1.5	1.7	6.9	6.3	0.3	0.1
TAKEOFF										
23	92.8	89.4	80.9	92.6	93.9	95.4	15.0	13.5	1.6	-1.1
25	92.9	89.6	80.0	92.6	92.0	93.5	16.0	14.5	1.6	-1.0
27	92.3	89.1	80.3	92.6	92.4	94.0	15.0	13.5	1.6	-1.0
29	91.9	88.5	79.6	92.1	91.7	93.0	14.5	14.0	1.3	-1.1
31	92.7	89.4	80.0	92.5	92.3	94.0	16.0	14.5	1.8	-1.2
33	92.3	89.1	79.7	92.3	92.4	93.9	16.5	15.0	1.4	-1.1
35	92.9	89.6	81.0	92.6	93.4	95.0	15.0	14.0	1.6	-1.1
37	92.4	89.1	79.7	91.8	91.8	93.3	16.5	15.5	1.5	-1.2
39	92.5	89.4	79.9	92.0	91.8	93.2	17.0	14.5	1.5	-1.1
41	91.7	88.4	79.2	91.8	91.4	92.8	15.0	14.5	1.4	-1.1
Avs.	92.5	89.2	80.0	92.3	92.3	93.8	15.6	14.3	1.5	-1.1
Std Dv	0.4	0.4	0.6	0.4	0.8	0.8	0.9	0.6	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.3-2.5

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
11/18/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS										
21	87.6	84.4	73.9	89.4	85.8	87.3	24.5	24.5	1.4	-1.0
22	88.4	85.9	73.9	84.4	85.7	86.7	35.5	35.0	1.1	-0.8
46	-	85.2	77.3	85.8	89.0	90.1	14.5	-	1.1	-
47	87.2	84.3	74.1	89.1	85.9	86.9	25.0	24.0	1.1	-0.9
Avs.	87.7	84.9	74.8	87.2	86.6	87.8	24.9	20.9	1.2	-0.9
Std Dv	0.6	0.8	1.7	2.5	1.6	1.6	8.6	14.8	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS										
51	87.9	85.1	74.7	87.5	86.6	87.5	28.5	28.0	0.9	-1.0
52	88.3	85.6	76.5	86.4	88.7	90.1	22.0	19.0	1.4	-0.8
53	86.9	83.8	74.0	86.9	85.7	86.5	26.0	26.0	0.8	-1.0
56	87.7	85.2	75.2	85.4	87.5	89.0	28.0	18.5	1.5	-0.7
Avs.	87.7	84.9	75.1	86.6	87.1	88.3	26.1	22.9	1.1	-0.8
Std Dv	0.6	0.8	1.1	0.9	1.3	1.6	3.0	4.8	0.4	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS										
54	89.7	87.2	76.7	87.9	88.6	90.2	24.0	23.0	1.6	-1.2
55	87.6	84.6	74.4	87.4	85.7	86.8	25.0	25.0	1.1	-1.2
57	86.9	83.9	73.8	87.4	85.3	86.9	23.5	22.0	2.1	-1.2
58	88.4	86.1	75.9	87.0	87.5	88.9	27.5	20.0	1.4	-0.7
Avs.	88.2	85.4	75.2	87.4	86.8	88.2	25.0	22.5	1.6	-1.1
Std Dv	1.2	1.5	1.3	0.4	1.5	1.7	1.8	2.1	0.4	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
17	90.8	87.5	78.0	91.7	90.4	92.5	18.0	15.5	2.3	-1.7
18	90.8	88.4	79.3	90.5	89.6	91.6	18.5	18.0	2.0	-1.0
19	90.8	87.4	80.0	91.3	92.1	94.5	13.5	12.0	2.4	-1.7
20	90.4	88.1	78.9	91.4	89.8	91.2	21.5	21.5	1.5	-1.0
62	90.2	87.7	77.9	91.1	89.5	90.7	20.5	19.0	1.2	-1.1
63	89.7	86.5	76.9	90.6	88.9	91.3	17.0	15.0	2.4	-1.6
Avs.	90.5	87.6	78.5	91.1	90.0	92.0	18.2	16.8	2.0	-1.3
Std Dv	0.4	0.6	1.1	0.5	1.1	1.4	2.8	3.4	0.5	0.3
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS										
48	93.5	90.9	82.8	95.0	93.7	96.0	17.0	16.5	2.4	-1.5
49	93.1	89.6	80.2	94.9	92.2	94.9	19.0	17.5	2.7	-1.8
50	91.2	88.1	78.9	95.3	89.4	91.7	18.0	18.0	2.3	-1.5
59	91.2	87.8	77.9	94.6	90.5	93.0	18.0	14.5	2.6	-1.5
60	92.7	89.8	80.2	94.2	91.4	93.8	19.0	18.5	2.4	-1.4
61	92.0	88.4	81.4	94.7	92.6	95.4	12.0	11.0	2.8	-1.9
Avs.	92.3	89.1	80.2	94.8	91.6	94.2	17.2	16.0	2.5	-1.6
Std Dv	1.0	1.2	1.7	0.4	1.5	1.6	2.6	2.8	0.2	0.2

BEST DOCUMENT AVAILABLE

TABLE NO. A.3-3.5

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
11/18/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 24,1980

300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
9	90.6	87.2	78.3	92.5	89.9	91.9	14.0	13.5	2.5	-1.4
10	92.6	90.2	80.2	92.6	91.1	92.5	17.5	17.5	1.3	-1.1
15	90.6	87.2	79.1	91.9	91.1	93.6	16.5	14.0	2.5	-1.6
16	91.6	89.1	79.8	91.9	90.8	91.8	16.5	16.5	1.0	-1.0
Avg.	91.3	88.4	79.3	92.2	90.7	92.4	16.1	15.4	1.8	-1.3
Std Dv	0.9	1.5	0.8	0.4	0.6	0.8	1.5	1.9	0.8	0.3

700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
7	89.9	86.4	76.7	88.7	89.0	91.4	19.0	17.0	2.5	-1.8
8	90.1	87.8	77.9	90.1	88.6	90.3	24.5	24.0	1.7	-1.1
13	90.1	86.6	79.0	89.8	88.9	91.7	15.0	17.0	2.8	-1.7
14	89.6	87.2	76.9	89.5	87.6	89.2	26.0	25.5	1.6	-1.1
Avg.	89.9	87.0	77.6	89.5	88.5	90.7	21.1	20.9	2.1	-1.4
Std Dv	0.3	0.6	1.0	0.6	0.6	1.1	5.1	4.5	0.6	0.4

1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
2	89.4	86.7	74.5	88.3	86.5	88.5	34.0	31.5	2.0	-1.4
3	88.5	85.1	75.5	86.3	87.1	89.6	20.5	19.0	2.5	-1.9
4	88.7	86.0	74.3	88.2	86.2	88.1	32.5	29.5	1.9	-1.3
42	89.6	86.7	76.2	87.9	87.3	89.3	34.0	33.5	2.0	-1.6
43	89.6	86.2	76.6	86.6	86.9	89.6	20.5	20.5	2.8	-1.8
44	88.3	85.3	75.2	86.8	87.1	88.9	25.0	23.0	1.8	-1.3
45	88.7	85.4	75.6	85.9	86.0	88.7	25.5	25.0	2.7	-1.6
Avg.	89.0	85.9	75.4	87.1	86.7	89.0	27.4	26.0	2.2	-1.5
Std Dv	0.5	0.7	0.8	1.0	0.5	0.6	6.0	5.6	0.4	0.2

1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
5	85.7	82.6	71.4	82.2	82.5	84.6	29.5	27.5	2.6	-1.6
6	87.1	84.3	71.7	85.5	83.5	85.5	37.0	28.0	2.1	-1.4
11	85.0	81.9	70.3	81.3	81.8	83.9	29.0	27.5	2.2	-1.6
12	87.1	84.2	72.1	85.4	82.5	84.7	34.5	33.5	2.2	-1.5
Avg.	86.2	83.3	71.4	83.6	82.6	84.7	32.5	29.1	2.2	-1.6
Std Dv	1.0	1.2	0.8	2.2	0.7	0.6	3.9	2.9	0.2	0.1

TABLE NO. A.3-1.5G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/29/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
24	96.1	93.6	82.9	88.5	94.4	95.4	33.0	32.5	1.0	-0.6
26	96.8	94.9	84.9	88.3	95.2	96.7	25.0	25.0	1.4	-0.5
28	97.5	95.4	85.0	90.4	96.4	97.1	21.5	22.0	0.7	-0.5
32	97.8	95.6	85.6	90.2	97.4	98.7	23.5	21.0	1.3	-0.7
34	98.0	95.7	86.2	89.4	97.8	99.1	20.0	19.5	1.3	-0.5
36	95.6	93.4	82.8	88.6	94.4	95.1	26.0	25.0	0.8	-0.6
38	96.5	94.0	84.8	89.5	96.2	97.5	25.5	23.0	1.3	-0.6
40	95.6	93.1	82.4	88.1	93.8	94.4	38.5	39.0	0.6	-0.5
64	93.5	90.5	81.6	87.9	93.2	93.9	17.5	21.0	0.7	-0.4
Avg.	96.4	94.0	84.0	89.0	95.4	96.4	25.6	25.3	1.0	-0.5
Std Dv	1.4	1.6	1.6	0.9	1.6	1.8	6.5	6.4	0.3	0.1
TAKEOFF										
23	96.1	93.0	85.2	92.7	97.2	98.6	12.0	12.0	1.4	-0.9
25	95.8	92.2	83.4	92.2	95.9	97.4	13.5	12.5	1.5	-0.8
27	95.0	91.5	83.6	92.3	95.9	97.4	13.0	12.5	1.5	-0.8
29	-	89.7	82.5	91.8	94.6	95.9	9.5	-	1.3	-
31	95.9	92.7	34.2	92.5	96.3	97.6	13.5	13.0	1.3	-0.7
33	95.8	92.7	84.4	92.4	96.3	97.8	14.0	13.0	1.5	-0.7
35	96.2	92.7	84.7	92.8	96.8	98.2	12.5	13.0	1.7	-0.8
37	95.6	92.3	84.0	91.9	96.2	97.6	13.5	13.0	1.4	-0.8
39	96.0	92.6	84.8	92.2	97.1	98.5	12.5	12.5	1.4	-0.8
41	95.6	92.3	83.5	92.0	95.6	96.9	13.5	13.5	1.3	-0.7
Avg.	95.8	92.2	84.0	92.3	96.2	97.6	12.7	11.5	1.4	-0.8
Std Dv	0.3	0.9	0.8	0.3	0.8	0.8	1.3	4.1	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.3-2.5G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
1/12/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS										
21	90.4	87.3	78.6	88.8	89.9	90.5	19.5	23.0	0.5	-0.8
22	91.5	88.7	77.9	85.1	89.5	90.8	27.5	27.0	1.3	-0.7
46	92.2	89.2	80.8	86.9	92.6	94.0	20.0	17.0	1.4	-0.7
47	90.4	87.6	78.6	88.7	90.1	91.0	19.0	19.0	0.9	-0.7
Avs.	91.1	88.2	79.0	87.4	90.5	91.6	21.5	21.5	1.0	-0.7
Std Dv	0.9	0.9	1.2	1.7	1.4	1.6	4.0	4.4	0.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS										
51	90.5	87.8	78.8	87.6	90.0	91.2	19.0	19.5	1.2	-0.8
52	91.9	89.1	79.9	87.5	92.2	93.5	19.0	17.0	1.2	-0.8
53		----------		NO DATA		----------				
56	91.3	88.4	79.1	86.7	90.7	92.1	18.0	17.5	1.4	-0.8
Avs.	91.2	88.4	79.3	87.3	91.0	92.3	18.7	18.0	1.2	-0.8
Std Dv	0.7	0.7	0.6	0.5	1.1	1.2	0.6	1.3	0.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS										
54		----------		NO DATA		----------				
55	90.7	87.7	79.0	87.7	89.9	90.7	16.5	21.5	0.9	-1.0
57	90.2	87.4	78.8	87.6	89.7	90.7	19.5	20.0	0.9	-0.9
58	91.7	89.1	80.3	87.9	91.7	93.0	19.0	18.0	1.3	-0.8
Avs.	90.9	88.1	79.4	87.8	90.5	91.5	18.3	19.8	1.1	-0.9
Std Dv	0.8	0.9	0.8	0.2	1.1	1.3	1.6	1.8	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
17	94.1	90.9	82.9	92.1	94.5	96.0	15.0	15.0	1.4	-1.4
18	93.7	91.0	82.2	91.0	93.2	94.2	16.5	16.0	1.0	-0.7
19	94.4	91.4	83.5	92.2	94.9	97.2	13.0	13.0	2.3	-1.4
20	94.1	91.3	83.2	92.0	94.5	95.6	15.5	14.0	1.1	-0.7
62	93.3	90.5	81.7	91.8	93.4	94.2	15.5	16.0	0.8	-0.9
63	93.4	90.4	81.6	91.4	92.8	94.9	14.5	14.0	2.2	-1.1
Avs.	93.8	90.9	82.5	91.8	93.9	95.3	15.0	14.7	1.5	-1.0
Std Dv	0.4	0.4	0.8	0.5	0.9	1.2	1.2	1.2	0.7	0.3
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS										
48	96.1	93.1	34.9	95.3	96.8	97.7	13.5	12.5	1.1	-1.0
49	95.7	92.5	83.6	94.8	95.5	98.1	17.0	13.5	2.5	-1.4
50	95.7	92.7	85.0	95.7	96.5	97.1	13.5	13.5	0.9	-0.9
59	94.6	91.3	83.3	94.5	95.1	97.3	13.5	12.5	2.2	-1.5
60	95.4	92.3	83.8	94.3	96.4	97.8	13.5	12.5	1.3	-1.0
61	95.2	91.8	83.8	94.8	95.3	98.0	11.0	10.5	2.7	-1.5
Avs.	95.5	92.3	84.1	94.9	96.0	97.7	13.7	12.5	1.8	-1.2
Std Dv	0.5	0.7	0.7	0.5	0.7	0.4	1.9	1.1	0.8	0.3

TABLE NO. A.3-3.5G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/29/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
9	94.0	90.6	82.8	92.1	94.5	96.1	12.0	12.5	1.8	-1.2
10	95.2	92.0	85.1	92.4	96.7	97.6	13.5	14.0	0.9	-0.8
15	94.0	90.5	82.5	91.8	95.3	97.5	14.0	10.5	2.2	-1.2
16	94.8	91.5	84.1	92.4	96.3	97.4	12.5	13.0	1.1	-0.9
Avs.	94.5	91.2	83.6	92.2	95.7	97.1	13.0	12.5	1.5	-1.0
Std Dv	0.6	0.7	1.2	0.3	1.0	0.7	0.9	1.5	0.6	0.2
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
7	92.9	89.9	80.4	89.4	91.9	93.2	16.0	17.5	2.1	-1.3
8	92.8	90.1	80.4	90.1	92.1	93.0	24.5	23.5	0.9	-0.9
13	93.6	90.6	81.8	90.5	93.7	95.5	14.5	14.0	1.8	-1.4
14	92.2	89.6	80.1	89.4	91.2	92.6	20.5	19.5	1.4	-0.8
Avs.	92.9	90.0	80.7	89.8	92.2	93.6	18.9	18.6	1.6	-1.1
Std Dv	0.6	0.4	0.8	0.5	1.0	1.3	4.5	4.0	0.5	0.3
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
1		----------		NO DATA		----------				
2	91.5	88.9	77.8	88.1	89.3	90.7	29.5	25.5	1.4	-1.0
3	91.7	88.8	78.7	87.6	90.0	91.9	20.5	19.5	2.6	-1.5
4	91.4	88.8	78.1	88.0	89.4	90.9	26.5	25.5	1.6	-0.9
42	92.1	89.1	79.5	87.9	91.1	92.5	22.0	22.5	1.4	-1.1
43	92.6	89.7	79.4	87.2	89.8	92.2	21.0	20.5	2.7	-1.6
44	90.9	88.2	78.4	87.0	90.0	91.5	20.5	19.5	1.5	-1.0
45	92.1	89.0	79.0	86.9	90.1	92.0	25.5	25.0	2.6	-1.5
Avs.	91.8	88.9	78.7	87.5	90.0	91.7	23.6	22.6	2.0	-1.2
Std Dv	0.6	0.4	0.6	0.5	0.6	0.7	3.5	2.8	0.6	0.3
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
5	88.8	86.2	75.9	83.9	86.8	88.3	25.0	24.0	1.6	-1.1
6	89.6	87.0	74.7	85.8	86.3	88.0	31.5	29.5	1.7	-1.1
11	88.1	85.5	75.5	82.9	86.1	87.6	26.5	26.5	1.5	-1.1
12	89.3	86.6	74.1	85.2	85.7	87.4	34.0	32.0	1.8	-1.1
Avs.	89.0	86.3	75.1	84.5	86.2	87.8	29.2	28.0	1.6	-1.1
Std Dv	0.7	0.6	0.8	1.3	0.5	0.4	4.2	3.5	0.1	0.0

TABLE NO. A.3-1.6

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/30/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE-284M. NORTH JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
24	91.3	89.0	78.7	88.7	90.3	92.3	28.5	25.0	2.0	-0.6
26	91.6	88.6	78.8	88.6	90.6	92.6	27.0	26.0	2.2	-1.2
28	89.4	87.1	75.2	86.5	86.9	87.7	40.5	40.5	0.8	-0.5
32	88.5	86.1	73.4	86.3	84.8	86.1	41.0	41.0	1.8	-0.5
34	88.6	86.3	74.8	86.1	86.8	87.4	43.0	38.5	0.7	-0.5
36	90.1	87.9	76.8	86.2	88.6	89.4	33.0	32.0	0.9	-0.5
38	89.0	86.3	75.0	85.2	85.0	87.3	36.0	36.0	2.4	-0.8
40	90.1	88.1	77.9	86.4	88.4	89.0	25.0	28.0	0.6	-0.4
64	87.8	86.1	77.9	86.8	89.3	90.2	23.0	15.0	0.9	-0.4
Avs.	89.6	87.3	76.5	86.8	87.9	89.1	33.0	31.3	1.4	-0.6
Std Dv	1.3	1.2	2.0	1.2	2.1	2.3	7.5	8.6	0.7	0.3
TAKEOFF										
23	88.6	86.0	76.8	84.7	87.6	89.1	21.5	21.5	1.6	-1.0
25	89.1	86.3	77.9	84.8	88.2	90.4	18.5	18.5	2.2	-0.8
27	88.5	85.9	76.5	84.4	87.2	89.3	25.0	20.5	2.1	-0.7
29	-	85.1	76.2	84.6	87.5	89.2	18.5	-	1.7	-
31	88.9	86.3	76.7	84.5	87.9	89.6	20.5	17.5	1.8	-1.1
33	88.8	86.2	75.5	83.8	86.4	88.3	23.5	23.5	2.0	-1.1
35	88.4	85.9	75.9	84.1	87.1	89.0	22.0	18.5	1.9	-0.8
37	89.5	87.2	77.4	84.8	88.1	90.1	22.5	19.5	2.0	-0.9
39	89.1	86.7	76.3	84.9	87.7	89.4	24.0	21.0	1.7	-0.8
41	88.6	86.0	76.4	85.1	87.6	89.3	18.5	18.0	1.7	-1.0
Avs.	88.8	86.1	76.6	84.6	87.5	89.4	21.4	17.8	1.9	-0.9
Std Dv	0.3	0.5	0.7	0.4	0.5	0.6	2.4	6.5	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.3-2.6

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/30/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE-284M. NORTH JUNE 24,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS										
21		----------		NO DATA		----------				
22	83.7	81.0	69.9	85.1	81.1	82.6	39.5	37.0	1.9	-0.8
46	83.5	80.7	70.3	84.9	81.7	83.2	34.5	29.0	1.6	-0.8
47	85.7	83.4	73.5	80.7	84.0	85.6	39.5	35.0	1.8	-0.7
Avs.	84.3	81.7	71.2	83.5	82.3	83.8	37.8	33.7	1.8	-0.8
Std Dv	1.2	1.5	2.0	2.5	1.5	1.6	2.9	4.2	0.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS										
51	84.7	82.2	71.2	82.0	81.3	83.3	32.5	32.0	2.4	-0.8
52	83.4	80.6	69.2	84.8	80.6	82.2	37.0	36.5	1.6	-1.1
53	85.2	82.7	70.5	82.2	82.3	83.6	39.0	36.5	1.3	-0.8
56	-	80.3	68.9	84.5	80.6	82.5	35.0	-	1.9	-
Avs.	84.4	81.4	70.0	83.4	81.2	82.9	35.9	26.2	1.8	-0.9
Std Dv	1.0	1.2	1.1	1.5	0.8	0.7	2.8	17.6	0.5	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS										
54	85.0	82.0	71.6	85.3	81.7	83.8	26.0	26.0	2.4	-1.3
55	-	83.2	72.6	84.4	83.3	84.7	29.5	-	1.4	-
57	85.3	82.8	71.4	83.9	82.2	83.6	32.5	32.0	1.4	-0.8
58	84.1	81.1	69.2	84.9	80.7	82.9	31.5	30.0	2.2	-1.1
Avs.	84.8	82.3	71.2	84.6	82.0	83.7	29.9	22.0	1.9	-1.1
Std Dv	0.6	0.9	1.4	0.6	1.1	0.7	2.9	14.9	0.5	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS										
17	87.9	85.6	76.1	87.9	86.7	88.9	24.5	23.0	2.2	-0.8
18	86.6	83.9	72.7	87.0	84.1	85.3	29.5	27.0	2.0	-1.0
19	88.4	85.9	74.9	88.0	85.9	87.0	26.0	26.5	1.1	-0.9
20	87.4	84.6	73.7	88.6	84.8	87.2	29.0	24.5	2.4	-1.0
62	85.8	82.7	72.3	87.4	83.3	85.4	25.0	24.5	2.6	-1.3
63	88.8	86.4	75.7	89.7	86.6	88.0	24.5	24.5	1.5	-0.8
Avs.	87.5	84.8	74.2	88.1	85.2	87.0	26.4	25.0	2.0	-1.0
Std Dv	1.1	1.4	1.6	0.9	1.4	1.4	2.3	1.5	0.6	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS										
48	89.7	86.0	76.4	91.9	89.0	91.5	21.0	16.0	2.5	-1.6
49	91.2	88.7	81.8	90.1	91.8	94.3	18.0	17.0	2.5	-1.3
50	88.9	84.8	76.8	91.4	87.4	90.4	20.0	19.0	3.0	-1.7
59	89.4	86.9	76.8	91.4	88.3	89.3	26.0	22.0	1.3	-0.8
60	88.6	84.8	73.4	92.1	85.9	88.5	25.0	19.5	2.7	-1.7
61	89.1	86.6	76.9	90.6	87.9	88.9	26.5	21.5	1.0	-0.9
Avs.	89.5	86.3	77.0	91.2	88.4	90.5	22.7	19.2	2.2	-1.3
Std Dv	0.9	1.5	2.7	0.8	2.0	2.2	3.5	2.4	0.8	0.4

TABLE NO. A.3-3.6

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/30/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE-284M. NORTH JUNE 24,1980

300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
9	88.1	85.6	75.3	85.3	86.5	88.3	22.5	21.5	1.7	-1.1
10	87.0	83.8	73.7	87.6	85.4	86.6	22.5	22.5	1.3	-1.2
15	88.3	85.7	75.4	85.9	86.9	88.6	25.0	20.5	1.7	-0.9
16	87.3	84.2	74.4	87.6	85.8	88.3	22.5	19.0	2.5	-1.1
Avs.	87.7	84.8	74.7	86.6	86.1	87.9	23.1	20.9	1.8	-1.0
Std Dv	0.6	1.0	0.8	1.2	0.7	0.9	1.2	1.5	0.5	0.1

700 FT. FLYOVER – TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
7	86.9	84.1	72.8	86.0	84.1	85.9	27.5	25.0	1.8	-1.2
8	86.5	83.6	72.7	86.9	83.6	85.4	32.5	32.5	1.8	-1.0
13	87.0	84.2	74.6	87.2	85.7	87.6	23.5	23.0	1.9	-1.3
14	86.8	83.9	72.4	87.1	83.7	85.9	35.5	35.0	2.1	-1.4
Avs.	86.8	84.0	73.1	86.8	84.3	86.2	29.7	28.9	1.9	-1.2
Std Dv	0.2	0.3	1.0	0.5	1.0	0.9	5.3	5.8	0.2	0.1

1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1	-	80.2	70.7	86.8	81.6	83.1	16.0	-	2.2	-
2	86.0	83.2	70.1	86.0	81.5	83.3	42.0	40.0	2.2	-1.4
3	85.6	82.9	71.3	85.3	81.9	84.4	31.0	30.0	2.5	-1.4
4	85.7	82.9	70.6	85.3	82.1	83.2	35.5	35.0	0.9	-1.1
42	86.4	83.4	71.7	87.3	83.1	85.6	38.5	27.5	2.5	-1.4
43	86.6	84.3	73.4	86.5	84.3	86.7	34.0	26.0	2.4	-1.3
44	86.7	84.0	74.8	86.5	85.9	88.2	31.5	29.0	2.3	-1.2
45	87.1	84.3	76.8	86.5	87.2	89.7	23.0	22.0	2.5	-1.4
Avs.	86.3	83.2	72.4	86.3	83.4	85.5	31.4	26.2	2.2	-1.3
Std Dv	0.6	1.3	2.4	0.7	2.2	2.5	8.4	11.9	0.5	0.1

1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
5	-	80.4	67.6	84.2	78.9	80.4	36.5	-	1.5	-
6	85.4	82.5	71.8	84.7	83.0	85.5	32.5	28.0	2.5	-1.3
11	83.6	80.8	68.8	83.5	79.9	82.1	42.5	40.0	2.6	-1.1
12	85.6	82.5	69.9	84.8	81.1	83.7	44.5	42.5	2.6	-1.5
Avs.	84.9	81.6	69.5	84.3	80.7	82.9	39.0	27.6	2.3	-1.3
Std Dv	1.1	1.1	1.8	0.6	1.7	2.2	5.5	19.5	0.5	0.2

TABLE NO. A.4-1.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/16/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
40	95.9	93.0	84.3	93.1	96.4	97.2	14.5	14.0	0.9	-0.7
42	97.7	94.9	88.6	94.6	99.5	100.7	10.0	11.5	1.6	-0.7
44	97.1	94.3	86.0	93.4	97.7	98.2	16.5	17.0	0.5	-0.6
46	97.5	94.6	85.7	94.2	97.9	98.6	21.5	21.5	0.8	-0.7
48	96.4	94.0	85.7	93.6	97.4	98.0	21.5	19.0	0.6	-0.6
50	97.9	95.1	88.0	94.4	99.4	100.3	12.5	14.0	0.9	-0.7
Avg.	97.1	94.3	86.4	93.9	98.0	98.8	16.1	16.2	0.9	-0.7
Std Dv	0.8	0.8	1.6	0.6	1.2	1.4	4.7	3.7	0.4	0.1
TAKEOFF										
41	90.0	86.5	79.0	85.0	90.9	93.0	11.0	10.5	1.9	-1.6
43	89.1	85.5	77.5	81.8	89.1	90.8	12.5	12.5	2.0	-1.6
45	89.2	86.0	77.9	83.6	89.7	91.6	11.5	11.0	2.3	-1.6
47	88.9	85.6	77.7	83.3	89.8	91.7	13.0	12.5	2.2	-1.5
49	89.2	85.9	78.3	83.3	89.9	91.8	11.5	11.5	2.1	-1.5
51	89.3	86.3	78.5	83.3	90.1	92.2	12.5	10.5	1.9	-1.5
Avg.	89.3	86.0	78.2	83.4	89.9	91.9	12.0	11.4	2.1	-1.6
Std Dv	0.4	0.4	0.6	1.0	0.6	0.7	0.8	0.9	0.2	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
18	89.1	86.3	78.6	84.1	90.4	91.6	13.0	12.5	1.2	-1.0
19	88.0	85.2	78.5	83.9	90.5	91.9	10.5	10.0	1.5	-1.0
20	89.5	86.5	78.8	84.6	90.5	91.9	14.0	13.0	1.4	-1.1
21	88.5	85.6	79.2	84.8	91.0	92.3	9.0	8.5	1.3	-0.8
22	89.8	87.0	80.2	84.8	91.9	93.1	13.5	12.0	1.2	-1.0
23	87.5	84.7	77.3	83.6	88.9	90.3	11.5	10.0	1.4	-1.0
Avg.	88.7	85.9	78.8	84.3	90.5	91.8	11.9	11.0	1.3	-1.0
Std Dv	0.9	0.9	1.0	0.5	1.0	0.9	1.9	1.8	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
24	88.9	85.9	79.5	85.7	90.9	92.3	10.5	11.0	1.4	-1.2
25	88.1	85.2	79.8	87.6	91.3	93.1	7.5	7.0	1.8	-1.2
26	89.7	86.8	80.5	86.2	91.7	93.2	10.5	10.5	1.5	-1.1
27	88.6	85.9	80.2	87.0	91.8	93.4	9.0	8.0	1.6	-1.2
28	90.0	86.9	80.1	86.2	91.6	93.2	11.5	11.0	1.7	-1.2
29	88.6	85.7	79.0	86.2	91.1	92.1	10.5	10.0	1.0	-1.0
Avg.	89.0	86.1	79.9	86.5	91.4	92.9	9.9	9.6	1.5	-1.1
Std Dv	0.7	0.6	0.5	0.7	0.4	0.5	1.4	1.7	0.3	0.1

TABLE NO. A.4-2.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/16/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
10	92.5	89.6	84.8	96.7	96.2	97.8	7.0	6.5	1.5	-0.9
11	92.1	89.2	85.2	95.8	96.9	98.4	5.0	5.0	1.5	-1.0
16	94.4	91.1	86.1	96.4	98.0	99.8	6.5	6.5	1.8	-1.1
17	91.4	88.4	84.3	95.3	95.6	97.4	5.5	6.0	1.7	-1.1
Avs.	92.6	89.6	85.1	96.1	96.7	98.3	6.0	6.0	1.6	-1.0
Std Dv	1.3	1.1	0.8	0.6	1.0	1.0	0.9	0.7	0.1	0.1
700 FT.FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
8	89.7	87.3	80.2	91.9	90.7	92.2	12.0	12.5	1.6	-1.0
9	87.4	85.0	78.2	91.6	89.0	90.1	10.0	11.5	1.2	-0.9
14	88.2	85.6	77.9	90.5	88.9	90.2	13.0	14.0	1.4	-1.0
15	86.5	83.9	77.1	91.0	88.2	89.5	10.0	12.0	1.3	-1.1
Avs.	87.9	85.5	78.4	91.3	89.2	90.5	11.2	12.5	1.4	-1.0
Std Dv	1.3	1.4	1.3	0.6	1.1	1.2	1.5	1.1	0.2	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
1	85.3	82.9	74.7	88.7	85.1	86.6	13.5	16.0	1.6	-1.0
2	86.7	84.4	75.1	88.6	85.4	86.6	22.5	24.0	1.2	-0.9
3	85.6	83.6	76.2	89.5	85.8	87.2	14.0	14.5	1.4	-1.1
4	86.6	84.5	75.9	88.9	85.9	87.4	17.0	17.5	1.5	-1.0
52	86.1	84.0	74.9	88.6	85.1	86.6	20.0	20.0	1.5	-0.9
53	83.6	81.8	73.5	88.3	84.2	85.4	15.5	15.5	1.2	-0.7
54	86.4	84.4	76.3	88.1	86.6	87.9	19.5	20.0	1.3	-1.0
55	85.2	83.3	75.8	88.4	86.2	87.3	12.0	12.5	1.1	-0.9
Avs.	85.7	83.6	75.3	88.6	85.5	86.9	16.7	17.5	1.4	-0.9
Std Dv	1.0	0.9	0.9	0.4	0.7	0.7	3.7	3.7	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-3.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/17/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	81.5	79.6	69.9	85.6	80.4	81.6	20.5	22.5	1.4	-0.9
6	83.5	81.7	71.3	84.6	81.4	83.0	29.0	28.5	1.5	-0.9
7	81.4	79.8	70.3	85.4	80.4	81.8	19.5	20.5	1.3	-1.0
12	84.1	82.0	72.2	86.8	81.6	83.3	21.5	26.5	1.7	-1.0
13	81.1	79.4	70.5	86.6	80.2	81.8	17.0	19.0	1.7	-1.1
38	82.9	81.2	71.4	83.9	81.0	82.4	23.0	26.5	1.4	-1.0
39	81.5	79.9	70.0	82.8	80.2	81.6	20.5	19.5	1.4	-1.0
Avs.	82.3	80.5	70.8	85.1	80.7	82.2	21.6	23.3	1.5	-1.0
Std Dv	1.2	1.1	0.9	1.4	0.6	0.7	3.8	3.8	0.2	0.1
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
34	81.3	79.5	69.5	84.2	79.4	80.6	23.0	28.0	1.5	-1.0
35	80.2	78.6	69.1	83.0	78.5	80.0	23.0	26.0	1.5	-1.0
36	-	78.5	67.9	82.4	77.5	79.2	29.0	-	1.6	-
37	79.4	77.7	67.7	82.1	76.9	78.2	22.5	29.5	1.4	-0.9
Avs.	80.3	78.6	68.6	83.0	78.1	79.5	24.4	20.9	1.5	-1.0
Std Dv	1.0	0.8	0.9	0.9	1.1	1.0	3.1	14.0	0.1	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
30	-	76.8	64.8	81.6	74.6	75.9	37.0	-	1.3	-
31	-	75.5	64.0	82.0	73.8	74.9	31.5	-	1.4	-
32	79.4	77.9	66.7	81.6	75.8	77.2	33.5	36.5	1.6	-1.0
33	-	75.5	65.3	80.8	74.6	75.9	29.0	-	1.4	-
Avs.	79.4	76.4	65.2	81.5	74.7	76.0	32.7	9.1	1.4	-1.0
Std Dv	-	1.1	1.1	0.5	0.8	0.9	3.4	18.2	0.1	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-1.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 1G CENTERLINE-CENTER (FLUSH) JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
40	100.3	97.3	88.4	95.9	100.1	101.0	15.5	15.5	0.9	-0.3
42	102.2	99.3	92.6	98.1	104.0	104.5	11.5	12.0	0.5	-0.6
44	101.4	98.4	90.7	97.5	102.4	102.8	13.5	16.5	0.5	-0.3
46	101.2	98.4	89.4	97.1	101.4	102.4	19.5	16.5	1.0	-0.2
48	100.6	97.9	89.6	97.0	101.6	102.2	18.0	16.5	0.9	-0.3
50	101.7	99.1	91.5	97.8	102.9	103.6	13.0	14.0	0.7	-0.4
Avs.	101.2	98.4	90.3	97.2	102.1	102.7	15.2	15.2	0.7	-0.3
Std Dv	0.7	0.8	1.5	0.8	1.3	1.2	3.1	1.8	0.2	0.1
TAKEOFF										
41	94.5	90.8	82.7	88.8	94.2	96.6	11.5	11.5	2.5	-1.3
43	94.0	90.3	82.8	86.6	94.3	96.1	11.5	12.5	1.8	-1.3
45	93.9	90.5	83.3	88.2	94.5	96.2	10.5	11.5	2.4	-1.3
47	93.6	90.1	82.5	87.9	94.0	96.0	12.5	13.0	2.3	-1.3
49	94.0	90.5	82.7	88.1	94.0	96.2	11.5	12.0	2.2	-1.2
51	94.1	90.8	83.0	87.8	94.1	96.5	12.5	12.5	2.4	-1.2
Avs.	94.0	90.5	82.8	87.9	94.2	96.2	11.7	12.2	2.3	-1.3
Std Dv	0.3	0.3	0.3	0.7	0.2	0.3	0.8	0.6	0.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
18	93.8	90.9	83.1	88.3	94.6	95.8	13.0	13.0	1.3	-0.7
19	91.7	89.0	82.6	87.8	94.6	95.7	10.0	10.0	1.2	-0.4
20	93.8	90.5	83.2	88.3	94.9	96.2	12.5	13.0	1.3	-0.8
21	92.4	89.7	83.3	88.4	94.8	95.8	8.5	7.5	0.8	-0.4
22	94.1	91.0	84.8	88.7	96.1	97.4	10.5	12.0	1.3	-0.6
23	91.5	88.9	81.9	87.4	93.4	94.4	10.0	10.0	0.9	-0.4
Avs.	92.9	90.0	83.2	88.2	94.7	95.9	10.7	11.2	1.1	-0.5
Std Dv	1.2	0.9	1.0	0.5	0.9	1.0	1.7	1.6	0.2	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
24	93.4	90.3	83.9	88.9	95.4	97.0	10.5	10.0	1.6	-0.9
25	92.5	89.9	84.8	90.3	96.2	97.7	7.0	7.0	1.5	-0.7
26	94.1	91.1	84.6	89.4	96.0	97.7	10.5	10.0	1.7	-0.8
27	93.0	90.3	84.9	90.0	96.1	97.5	8.5	9.0	1.4	-0.7
28	94.3	91.2	84.4	89.2	96.2	97.7	11.5	11.0	1.5	-1.0
29	92.6	89.9	84.1	89.2	95.9	97.2	8.0	8.0	1.3	-0.6
Avs.	93.3	90.4	84.5	89.5	95.9	97.5	9.3	9.2	1.5	-0.8
Std Dv	0.8	0.6	0.4	0.5	0.3	0.3	1.8	1.5	0.1	0.1

TABLE NO. A.4-2.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107 %

AS MEASURED *

SITE: 1G CENTERLINE-CENTER (FLUSH) JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
10	96.4	93.2	88.6	97.6	100.1	101.5	6.5	7.0	1.4	-0.7
11	95.9	93.1	89.3	97.6	100.7	101.8	5.0	6.0	1.1	-0.5
16	98.8	95.4	90.9	98.6	102.9	104.3	6.0	6.0	1.5	-0.9
17	95.7	92.8	88.8	97.2	100.3	101.6	5.5	6.0	1.4	-0.7
Avs.	96.7	93.6	89.4	97.7	101.0	102.3	5.7	6.2	1.3	-0.7
Std Dv	1.4	1.2	1.0	0.6	1.3	1.3	0.6	0.5	0.2	0.2
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
8	93.6	91.1	84.5	92.8	94.9	96.2	11.0	12.5	1.3	-0.7
9	91.2	89.0	82.7	92.8	93.9	95.0	9.5	10.0	1.2	-0.4
14	92.4	89.9	82.6	92.1	93.9	94.9	13.0	13.0	1.2	-0.6
15	90.9	88.5	82.4	92.6	93.8	95.0	9.0	10.0	1.1	-0.4
Avs.	92.0	89.6	83.1	92.6	94.1	95.3	10.6	11.4	1.2	-0.5
Std Dv	1.2	1.2	1.0	0.4	0.5	0.6	1.8	1.6	0.1	0.2
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
1	88.6	86.6	79.0	89.7	89.8	90.9	13.0	14.5	1.3	-0.5
2	90.1	87.8	79.4	89.6	90.3	91.3	17.0	20.5	1.0	-0.7
3	89.0	87.1	79.9	90.6	90.2	91.5	14.0	14.0	1.4	-0.5
4	90.5	88.4	80.1	90.2	90.5	91.8	16.5	17.5	1.5	-0.6
52	90.5	88.4	79.9	90.0	91.0	92.2	17.0	15.5	1.2	-0.6
53	88.3	86.5	78.4	89.6	89.2	90.2	15.5	15.5	1.0	-0.2
54	91.1	88.8	81.2	89.7	91.8	93.2	16.5	16.5	1.4	-0.6
55	89.8	88.0	81.3	90.1	92.2	93.2	11.0	11.0	1.0	-0.2
Avs.	89.7	87.7	79.9	89.9	90.6	91.8	15.1	15.6	1.2	-0.5
Std Dv	1.0	0.9	1.0	0.3	1.0	1.1	2.2	2.8	0.2	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-3.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 1G   CENTERLINE-CENTER (FLUSH)   JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	85.4	83.5	74.3	86.8	85.1	86.4	19.5	21.0	1.3	-0.5
6	87.3	85.5	75.2	86.1	85.2	86.4	28.5	30.0	1.2	-0.5
7	85.7	83.9	75.1	87.2	85.5	87.0	18.5	19.0	1.5	-0.5
12	87.8	85.9	76.9	87.9	86.6	88.1	20.5	21.5	1.5	-0.7
13	85.6	83.9	75.5	87.4	85.5	87.1	16.0	15.5	1.6	-0.5
38	87.5	85.8	76.3	85.9	86.5	87.9	23.5	23.0	1.4	-0.6
39	85.9	84.5	75.2	84.9	85.6	86.9	18.5	19.0	1.3	-0.4
Avg.	86.5	84.7	75.5	86.6	85.7	87.1	20.7	21.3	1.4	-0.5
Std Dv	1.0	1.0	0.9	1.1	0.6	0.7	4.1	4.5	0.1	0.1
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
34	86.0	84.1	74.5	85.5	84.6	85.8	21.0	24.5	1.3	-0.6
35	84.6	83.1	74.4	84.6	84.0	85.5	19.5	23.5	1.5	-0.4
36	84.8	82.9	72.3	84.0	82.5	84.0	29.5	32.0	1.5	-0.7
37	84.2	82.5	72.9	84.0	82.7	84.0	21.0	22.5	1.3	-0.4
Avg.	84.9	83.1	73.5	84.5	83.4	84.8	22.7	25.6	1.4	-0.5
Std Dv	0.8	0.7	1.1	0.7	1.0	1.0	4.6	4.3	0.1	0.1
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
30	82.7	81.1	69.5	82.6	78.8	80.5	37.5	39.0	1.7	-0.7
31	81.3	79.7	68.7	82.6	78.6	79.8	29.5	34.0	1.3	-0.6
32	83.8	82.2	71.9	82.8	81.2	82.4	28.5	35.5	1.2	-0.6
33	82.2	80.3	70.2	82.4	79.9	81.2	28.5	33.0	1.3	-0.3
Avg.	82.5	80.8	70.1	82.6	79.6	81.0	31.0	35.4	1.4	-0.5
Std Dv	1.0	1.1	1.4	0.2	1.2	1.1	4.4	2.6	0.2	0.2

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-1.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107 %

AS MEASURED *

SITE: 1H CENTERLINE-CENTER (10-METER) JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
40	96.3	93.2	83.7	92.3	96.2	97.1	16.0	15.5	0.9	-0.4
42	100.1	97.4	89.9	96.6	101.7	102.4	12.5	13.0	0.8	-0.5
44	99.4	96.6	88.1	95.9	100.5	101.0	16.5	16.0	0.5	-0.5
46	99.4	96.6	87.5	96.2	99.9	100.2	19.5	19.5	0.3	-0.6
48	99.0	96.0	87.7	95.6	100.6	101.3	18.5	16.0	0.7	-0.5
50	99.7	97.0	89.7	96.3	101.3	101.8	12.5	13.5	0.7	-0.4
Avs.	99.0	96.1	87.8	95.5	100.0	100.6	15.9	15.6	0.7	-0.5
Std Dv	1.4	1.5	2.2	1.6	2.0	1.9	2.9	2.3	0.2	0.0
TAKEOFF										
41	92.7	88.8	80.8	88.1	93.1	95.6	11.0	10.5	2.4	-1.7
43	91.4	87.7	80.0	85.7	91.3	93.5	12.0	12.0	2.4	-1.5
45	91.4	87.9	80.4	86.7	92.1	94.4	10.5	10.0	2.4	-1.6
47	91.4	87.9	80.0	86.7	91.9	94.1	12.5	10.0	2.4	-1.5
49	91.4	88.0	80.1	86.5	92.1	94.1	11.5	10.0	2.1	-1.5
51	91.7	88.3	80.7	86.6	92.2	94.5	11.0	10.0	2.4	-1.5
Avs.	91.7	88.1	80.3	86.7	92.1	94.4	11.4	10.4	2.3	-1.5
Std Dv	0.5	0.4	0.4	0.8	0.6	0.7	0.7	0.8	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
18	90.0	87.1	78.6	85.6	90.9	92.2	17.5	13.5	1.4	-0.9
19	88.5	85.6	79.5	85.8	91.8	92.9	10.0	9.0	1.1	-0.7
20	90.2	87.0	79.1	86.2	91.5	92.9	15.0	13.0	1.4	-0.9
21	89.2	86.4	80.1	86.0	92.5	93.3	9.5	8.5	0.8	-0.5
22	90.6	87.4	79.9	86.1	92.2	93.5	13.0	12.0	1.3	-0.8
23	88.4	85.4	78.6	85.5	90.6	91.7	10.5	10.0	0.9	-0.7
Avs.	89.5	86.5	79.3	85.9	91.6	92.7	12.6	11.0	1.2	-0.7
Std Dv	0.9	0.9	0.7	0.3	0.7	0.7	3.2	2.1	0.3	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
24	89.9	86.7	79.8	87.5	91.7	93.6	11.0	10.5	1.8	-1.0
25	89.1	86.1	81.1	89.5	92.7	94.2	7.5	7.5	1.5	-1.0
26	90.5	87.6	80.6	87.6	92.7	94.4	13.0	9.5	1.8	-0.8
27	89.4	86.6	81.5	88.8	93.0	94.3	8.0	7.5	1.3	-0.9
28	90.8	87.8	80.5	87.5	92.7	94.2	12.5	11.0	1.5	-1.0
29	89.0	85.9	79.7	87.7	91.7	93.1	9.5	9.0	1.3	-0.9
Avs.	89.8	86.8	80.5	88.1	92.4	94.0	10.2	9.2	1.5	-0.9
Std Dv	0.8	0.8	0.7	0.9	0.6	0.5	2.3	1.5	0.2	0.1

TABLE NO. A.4-2.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
10/ 2/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107 %

AS MEASURED *

SITE: 1H CENTERLINE-CENTER (10-METER) JUNE 25,1980

300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
10	92.9	89.7	84.8	97.9	96.8	98.3	7.0	6.5	1.5	-0.8
11	92.4	89.4	85.5	96.9	97.3	98.3	5.5	5.5	1.0	-0.7
16	95.2	91.8	87.1	97.7	99.5	101.0	6.0	6.0	1.5	-1.0
17	92.3	89.2	85.2	96.6	97.0	98.3	6.0	6.0	1.3	-0.9
Avg.	93.2	90.0	85.6	97.3	97.7	99.0	6.1	6.0	1.3	-0.8
Std Dv	1.4	1.2	1.0	0.6	1.2	1.3	0.6	0.4	0.3	0.1

700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
8	89.8	87.2	80.0	93.1	91.3	92.8	12.0	12.0	1.5	-0.8
9	87.2	85.0	78.2	93.3	89.6	90.9	10.5	10.5	1.2	-0.6
14	89.2	86.5	78.7	92.7	90.3	91.7	14.0	14.0	1.4	-0.8
15	87.2	84.8	78.2	92.1	89.5	90.7	10.0	10.5	1.1	-0.6
Avg.	88.4	85.9	78.8	92.8	90.2	91.5	11.6	11.7	1.3	-0.7
Std Dv	1.3	1.2	0.8	0.5	0.8	1.0	1.8	1.7	0.2	0.1

1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1	85.1	82.7	74.8	90.1	86.2	87.2	13.5	15.0	1.0	-0.6
2	86.1	84.1	74.7	90.0	85.5	87.0	22.0	21.5	1.5	-0.7
3	85.6	83.5	76.2	91.0	86.2	87.5	13.5	15.0	1.4	-0.6
4	86.8	84.5	75.5	90.2	86.6	88.1	18.0	18.5	1.6	-0.8
52	87.9	86.1	77.4	91.6	87.7	89.0	19.5	20.0	1.3	-0.8
53	85.7	84.1	76.9	91.8	87.3	88.0	15.5	16.0	0.7	-0.5
54	88.5	86.4	77.8	91.4	88.6	90.1	19.0	19.5	1.6	-0.7
55	86.8	85.2	78.1	91.6	88.7	89.7	11.0	11.5	0.9	-0.5
Avg.	86.6	84.6	76.4	91.0	87.1	88.3	16.5	17.1	1.2	-0.6
Std Dv	1.2	1.3	1.3	0.8	1.2	1.2	3.7	3.3	0.3	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-3.1H

SIKORSKY S-76 SPIRIT HELICOPTER

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107 %

AS MEASURED *

DOT/TSC
10/ 2/80

SITE: 1H   CENTERLINE-CENTER (10-METER)   JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	81.4	79.5	70.0	87.4	81.2	82.5	20.5	21.0	1.3	-0.6
6	83.9	82.0	70.9	86.6	81.1	82.2	30.0	31.5	1.6	-0.7
7	81.8	80.1	71.6	87.2	81.3	82.6	19.5	19.5	1.3	-0.6
12	84.5	82.2	72.6	88.5	82.6	84.1	22.5	27.0	1.6	-0.9
13	81.4	79.5	71.2	88.3	80.9	82.4	16.0	18.5	1.5	-0.7
38	-	82.0	72.1	85.9	82.2	83.8	23.0	-	1.6	-
39	82.1	80.5	71.2	85.5	81.1	82.6	21.0	21.5	1.5	-0.7
Avg.	82.5	80.8	71.4	87.1	81.5	82.9	21.8	19.9	1.5	-0.7
Std Dv	1.4	1.2	0.8	1.1	0.6	0.7	4.3	9.9	0.1	0.1
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
34	81.8	79.9	69.5	85.0	79.6	81.0	26.0	32.5	1.4	-1.0
35	81.1	79.4	69.7	84.4	80.3	81.7	23.0	25.5	1.4	-0.7
36	-	79.4	67.9	84.2	79.3	80.6	36.0	-	1.4	-
37	80.4	78.4	68.5	84.2	79.2	80.8	24.5	23.5	1.6	-0.6
Avg.	81.1	79.3	68.9	84.5	79.6	81.1	27.4	20.4	1.5	-0.7
Std Dv	0.7	0.6	0.9	0.4	0.5	0.5	5.9	14.1	0.1	0.2
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
30	-	77.5	65.5	83.6	75.6	77.4	38.0	-	1.8	-
31	-	76.2	65.7	83.4	76.1	77.6	28.5	-	1.5	-
32	-	78.4	66.4	83.3	76.7	78.3	38.0	-	1.5	-
33	-	76.6	64.9	82.8	75.4	76.8	33.5	-	1.4	-
Avg.	-	77.2	65.6	83.3	76.0	77.5	34.5	0.0	1.6	-
Std Dv	0.0	1.0	0.6	0.3	0.6	0.6	4.5	0.0	0.2	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.4-1.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/13/81

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
40	96.7	93.4	85.3	93.8	98.1	98.9	14.0	13.0	0.8	-0.7
42	98.9	95.8	89.3	95.8	101.5	102.4	12.0	12.0	1.0	-0.6
44	98.5	95.0	88.5	95.4	100.7	101.7	12.5	13.0	0.9	-0.6
46	98.2	94.8	86.9	95.0	99.3	100.0	14.0	14.0	0.7	-0.6
48	98.0	94.6	87.9	94.5	100.4	101.4	12.0	11.5	1.0	-0.7
50	98.1	95.0	88.9	95.2	100.7	101.8	10.0	12.5	1.1	-0.7
Avg.	98.1	94.8	87.8	95.0	100.1	101.0	12.4	12.7	0.9	-0.7
Std Dv	0.7	0.8	1.5	0.7	1.2	1.3	1.5	0.9	0.2	0.0
TAKEOFF										
41	92.3	88.2	81.3	85.6	93.2	95.1	9.5	9.5	1.9	-1.6
43	91.9	87.6	80.8	84.2	92.8	95.0	10.5	10.0	2.2	-1.7
45	91.9	87.8	80.8	86.4	93.0	94.9	9.5	9.0	1.9	-1.6
47	92.2	88.1	82.1	86.5	93.8	95.4	8.5	8.5	1.4	-1.6
49	92.1	88.0	82.0	85.2	94.0	95.9	8.5	9.0	2.1	-1.6
51	92.1	88.0	82.0	85.6	93.8	95.9	8.0	8.0	2.1	-1.6
Avg.	92.1	88.0	81.5	85.6	93.4	95.4	9.1	9.0	1.9	-1.6
Std Dv	0.2	0.2	0.6	0.8	0.5	0.4	0.9	0.7	0.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
18	90.2	87.0	79.9	85.8	92.1	93.5	12.5	12.0	1.4	-1.1
19	88.7	85.4	78.8	84.2	91.2	92.4	11.5	10.5	1.2	-1.1
20	90.9	87.3	79.7	85.8	91.8	93.4	13.0	12.5	1.5	-1.1
21	89.0	86.0	78.7	84.4	91.2	92.3	11.5	11.0	0.9	-0.8
22	90.9	87.5	81.0	86.1	93.1	94.5	11.5	11.0	1.4	-1.1
23	88.3	85.2	78.3	84.2	91.0	92.1	10.5	9.5	1.1	-0.8
Avg.	89.7	86.4	79.4	85.1	91.7	93.0	11.7	11.1	1.2	-1.0
Std Dv	1.1	1.0	1.0	0.9	0.8	0.9	0.9	1.1	0.2	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
24	90.8	87.5	81.4	87.2	93.6	95.1	10.0	9.0	1.6	-1.1
25	89.3	86.1	80.3	88.6	92.3	93.8	8.0	7.5	1.4	-1.1
26	91.3	88.0	81.4	87.6	93.7	95.5	12.5	9.5	1.8	-1.2
27	90.6	87.4	81.7	88.4	93.6	94.8	8.5	8.5	1.4	-1.1
28	91.6	88.4	81.8	87.2	93.8	95.4	13.5	10.0	1.7	-1.0
29	89.4	86.2	79.4	87.5	92.0	93.1	10.0	9.5	1.1	-0.8
Avg.	90.5	87.3	81.0	87.7	93.2	94.6	10.4	9.0	1.5	-1.0
Std Dv	1.0	0.9	1.0	0.6	0.8	1.0	2.2	0.9	0.2	0.1

TABLE NO. A.4-2.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/31/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
10	93.4	89.9	85.1	97.6	97.5	98.8	7.0	7.0	1.3	-0.9
11	92.3	89.2	84.9	96.8	96.9	98.2	6.0	6.0	1.2	-0.8
16	95.1	91.7	86.7	97.0	99.1	100.7	7.0	6.0	1.6	-1.1
17	92.5	88.8	84.5	97.3	96.3	97.7	6.0	10.5	1.4	-1.1
Avg.	93.3	89.9	85.3	97.2	97.5	98.8	6.5	7.4	1.4	-1.0
Std Dv	1.3	1.3	1.0	0.4	1.2	1.3	0.6	2.1	0.2	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
8	89.9	87.3	79.6	91.7	91.2	92.1	13.0	13.0	0.9	-0.9
9	88.3	85.5	78.9	92.9	90.1	91.3	14.0	15.0	1.1	-0.7
14	88.9	86.2	78.6	91.6	89.8	91.0	13.5	14.0	1.3	-0.9
15	87.9	85.3	78.5	92.5	89.6	90.8	10.5	10.5	1.2	-0.9
Avg.	88.8	86.1	78.9	92.2	90.2	91.3	12.7	13.1	1.1	-0.8
Std Dv	0.9	0.9	0.5	0.6	0.7	0.6	1.6	1.9	0.2	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
1	85.0	82.7	74.3	89.4	84.8	86.1	14.5	15.0	1.3	-0.8
2	86.8	84.5	75.4	89.6	86.7	88.0	21.0	20.0	1.2	-0.8
3	85.4	83.1	74.6	89.7	85.8	86.8	15.0	15.0	0.9	-0.9
4	86.9	84.6	76.2	89.9	87.0	88.1	16.5	18.0	1.2	-0.9
52	86.8	84.3	76.0	89.9	86.4	87.7	17.5	20.0	1.3	-0.7
53	85.4	83.0	76.0	89.8	86.9	88.5	15.5	16.0	1.6	-0.7
54	86.9	84.8	76.1	89.4	86.4	87.6	20.0	22.0	1.2	-0.7
55	85.5	83.2	75.2	89.2	86.1	87.4	14.0	13.5	1.2	-0.7
Avg.	86.1	83.8	75.5	89.6	86.3	87.5	16.7	17.4	1.2	-0.8
Std Dv	0.8	0.9	0.7	0.3	0.7	0.8	2.6	3.0	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-3.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/26/81

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	81.7	79.6	70.8	86.9	80.4	81.8	20.5	22.0	1.6	-0.6
6	83.9	81.6	70.4	85.4	80.8	82.0	31.0	34.0	1.2	-0.6
7	81.3	79.3	70.8	85.7	80.5	81.4	19.5	24.0	1.1	-0.6
12	83.6	81.7	72.0	86.9	82.9	83.9	22.5	25.0	1.0	-0.8
13	81.4	79.5	71.2	87.7	81.2	82.5	17.5	19.5	1.4	-0.9
38	84.6	82.6	73.1	86.2	82.7	84.0	22.5	24.0	1.4	-0.7
39	82.8	80.7	72.4	84.6	82.6	83.9	20.0	20.5	1.3	-0.6
Avs.	82.7	80.7	71.5	86.2	81.6	82.8	21.9	24.1	1.3	-0.7
Std Dv	1.3	1.3	1.0	1.1	1.1	1.1	4.4	4.8	0.2	0.1
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
34	82.3	80.5	70.3	85.7	80.0	81.2	25.0	26.0	1.2	-0.7
35	81.3	79.1	69.9	83.9	79.3	80.4	25.0	34.5	1.2	-0.6
36	81.8	79.3	68.4	84.6	78.4	79.8	27.5	50.0	1.4	-0.6
37	80.8	78.6	68.0	83.9	78.1	79.7	27.5	30.0	1.6	-0.6
Avs.	81.5	79.4	69.1	84.5	79.0	80.3	26.2	35.1	1.3	-0.6
Std Dv	0.7	0.8	1.1	0.9	0.9	0.7	1.4	10.5	0.2	0.1
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
30	-	77.6	66.1	83.3	75.8	77.2	36.0	-	1.4	-
31	78.9	77.0	65.8	83.7	76.0	77.4	29.5	34.5	1.4	-0.7
32	-	78.9	67.7	83.8	77.4	78.7	32.5	-	1.4	-
33	79.5	77.2	66.6	83.2	76.8	78.4	30.0	32.0	1.7	-0.6
Avs.	79.2	77.7	66.6	83.5	76.5	77.9	32.0	16.6	1.5	-0.6
Std Dv	0.4	0.9	0.9	0.3	0.7	0.8	3.0	19.2	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-1.3

SIKORSKY S-76 SPIRIT HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
1/ 5/81

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
40	95.2	91.9	82.3	90.6	94.4	95.3	25.5	22.0	0.9	-0.7
42	96.3	93.4	85.6	91.6	96.6	97.9	16.5	17.5	1.2	-0.7
44	97.4	94.3	85.4	93.7	97.0	98.1	23.0	22.5	1.1	-0.6
46	97.2	94.2	84.7	92.4	96.5	97.3	22.0	22.0	0.9	-0.6
48	97.0	94.1	86.2	92.6	97.9	98.9	16.0	16.5	1.0	-0.8
50	96.2	93.4	85.3	92.2	97.4	98.2	17.0	15.5	0.8	-0.7
Avs.	96.5	93.6	84.9	92.2	96.7	97.6	20.0	19.3	1.0	-0.7
Std Dv	0.8	0.9	1.4	1.1	1.2	1.2	4.0	3.2	0.2	0.1
TAKEOFF										
41	89.0	85.4	77.8	82.9	89.0	90.6	12.0	11.5	2.4	-1.6
43	88.5	84.6	76.6	81.6	88.0	90.1	14.0	14.0	2.0	-1.6
45	89.1	85.9	77.2	83.2	88.7	90.9	13.0	12.5	2.2	-1.6
47	87.6	84.5	74.8	81.0	86.9	89.0	16.0	14.5	2.1	-1.4
49	88.1	84.8	75.7	81.2	87.2	89.1	15.5	15.0	2.2	-1.5
51	88.6	85.5	76.5	81.9	88.2	90.0	15.0	14.5	2.1	-1.5
Avs.	88.5	85.1	76.4	82.0	88.0	89.9	14.2	13.7	2.2	-1.5
Std Dv	0.6	0.6	1.1	0.9	0.8	0.8	1.5	1.4	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
18	90.6	87.5	80.8	86.4	92.2	93.7	14.0	14.0	1.5	-1.1
19	88.2	85.0	77.6	84.1	90.4	91.9	11.0	9.5	1.4	-1.0
20	90.3	87.1	80.1	85.8	91.7	93.3	13.0	12.5	1.5	-1.0
21	88.9	85.9	78.8	85.1	90.8	92.0	11.0	10.5	1.5	-1.0
22	90.6	87.3	81.0	86.2	92.8	94.2	11.0	10.5	1.4	-0.9
23	88.3	85.2	77.4	84.7	89.7	90.9	13.5	12.5	1.3	-1.0
Avs.	89.5	86.3	79.3	85.4	91.3	92.7	12.2	11.6	1.4	-1.0
Std Dv	1.1	1.1	1.6	0.9	1.2	1.3	1.4	1.7	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
24	90.2	86.7	80.4	87.0	92.4	94.5	11.0	10.0	2.1	-1.4
25	88.3	85.5	79.2	88.2	91.2	92.8	8.5	8.0	1.7	-1.1
26	89.9	87.0	80.4	86.2	91.4	93.0	12.0	11.5	1.6	-1.1
27	87.8	85.0	77.9	87.1	89.9	91.4	10.5	9.5	1.5	-1.0
28	90.1	87.2	81.0	86.7	92.3	93.8	11.0	11.0	1.5	-1.1
29	87.8	84.9	78.0	86.8	89.6	90.7	11.5	11.5	1.0	-0.9
Avs.	89.0	86.0	79.5	87.0	91.2	92.7	10.7	10.2	1.6	-1.1
Std Dv	1.2	1.0	1.3	0.7	1.2	1.4	1.2	1.4	0.3	0.2

TABLE NO. A.4-2.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/ 5/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
10	92.6	89.4	84.6	97.7	96.2	97.4	7.5	8.0	1.2	-0.9
11	92.2	89.1	84.1	96.9	96.2	97.4	6.5	6.0	1.2	-1.0
16	94.5	91.0	85.4	97.1	97.7	99.1	8.5	8.5	1.5	-0.9
17	92.4	89.1	84.5	97.1	96.6	98.4	6.0	5.5	1.9	-1.3
Avg.	92.9	89.7	84.7	97.2	96.7	98.1	7.1	7.0	1.4	-1.0
Std Dv	1.1	0.9	0.5	0.3	0.7	0.9	1.1	1.5	0.3	0.2
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
8	89.1	86.6	79.9	90.6	90.4	91.8	12.0	14.0	1.4	-0.8
9	86.5	84.1	76.7	92.6	88.2	89.3	11.5	11.5	1.1	-0.9
14	88.6	85.9	79.0	92.0	89.9	91.2	13.0	14.0	1.2	-0.9
15	87.1	84.6	77.1	92.4	88.3	89.6	12.5	11.5	1.4	-1.0
Avg.	87.8	85.3	78.2	91.9	89.2	90.5	12.2	12.7	1.3	-0.9
Std Dv	1.2	1.2	1.6	0.9	1.1	1.2	0.6	1.4	0.2	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
1	85.0	82.6	74.6	90.6	85.3	86.8	15.0	15.5	1.5	-1.1
2	86.3	84.1	75.1	90.6	84.7	85.9	20.0	23.0	1.2	-0.9
3	85.2	83.1	74.4	91.1	84.9	86.4	16.0	15.5	1.5	-1.0
4	87.1	84.6	76.5	90.3	86.7	88.0	16.5	18.0	1.3	-0.9
52	86.6	84.4	75.9	90.5	86.3	87.5	17.5	18.0	1.2	-0.9
53	84.0	81.6	73.1	90.2	84.3	85.6	15.0	15.5	1.3	-0.9
54	87.4	85.0	77.9	90.1	88.2	89.4	16.5	18.0	1.1	-0.9
55	85.9	83.6	75.0	90.5	86.0	87.1	13.5	16.0	1.1	-1.0
Avg.	85.9	83.6	75.3	90.5	85.8	87.1	16.2	17.4	1.3	-0.9
Std Dv	1.1	1.1	1.5	0.3	1.2	1.2	1.9	2.5	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-3.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/ 5/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	81.2	79.1	68.5	87.7	79.1	80.5	22.5	23.0	1.5	-1.1
6	84.4	82.2	72.5	87.7	82.1	83.3	23.5	27.5	1.2	-0.9
7	82.1	80.2	70.8	88.4	81.1	82.5	20.5	20.5	1.4	-1.1
12	83.9	82.1	73.8	88.1	82.8	83.8	19.5	25.5	1.0	-0.8
13	80.6	78.8	69.7	88.0	80.2	81.4	20.0	21.0	1.1	-0.9
38	84.1	81.9	73.1	86.3	82.7	83.9	20.5	30.5	1.3	-0.9
39	81.3	79.4	69.1	86.2	79.5	80.8	22.5	22.5	1.2	-1.0
Avs.	82.5	80.5	71.1	87.5	81.1	82.3	21.3	24.4	1.2	-1.0
Std Dv	1.6	1.5	2.1	0.9	1.5	1.4	1.5	3.7	0.2	0.1
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
34	81.8	80.0	69.8	86.7	79.4	80.8	23.0	27.0	1.4	-0.9
35	80.2	78.5	66.9	85.1	76.8	78.7	27.5	27.5	2.2	-1.1
36	81.1	79.0	69.2	85.0	78.6	80.0	27.5	33.5	1.3	-1.0
37	79.7	77.8	66.7	84.9	76.9	78.3	28.0	29.5	1.6	-1.1
Avs.	80.7	78.8	68.2	85.4	77.9	79.5	26.5	29.4	1.6	-1.0
Std Dv	0.9	0.9	1.6	0.8	1.3	1.1	2.3	3.0	0.4	0.1
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
30	-	76.9	65.8	83.1	74.9	76.1	34.5	-	1.2	-
31	-	74.9	64.4	83.3	74.4	75.6	32.0	-	1.2	-
32	-	78.1	66.9	83.8	76.2	77.3	33.0	-	1.1	-
33	-	75.6	64.3	82.9	74.7	75.9	32.5	-	1.1	-
Avs.	-	76.4	65.4	83.3	75.0	76.2	33.0	0.0	1.2	-
Std Dv	0.0	1.4	1.2	0.4	0.8	0.8	1.1	0.0	0.0	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-1.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/23/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 4 SIDELINE - 164 M. NORTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
40	94.9	92.2	83.0	88.9	93.7	95.5	21.5	18.5	1.8	-0.7
42	95.0	92.3	81.5	86.1	92.0	94.0	25.5	25.0	2.1	-1.1
44	95.7	92.7	84.0	89.6	94.6	96.7	21.5	22.0	2.0	-1.2
46	96.1	93.4	84.5	89.6	95.6	97.8	24.0	21.5	2.2	-0.9
48	94.4	91.6	82.4	88.3	93.6	95.4	21.5	21.0	1.8	-1.0
50	93.2	90.3	78.9	86.7	91.2	92.4	26.5	26.5	1.4	-0.9
Avs.	94.9	92.1	82.4	88.2	93.5	95.3	23.4	22.4	1.9	-1.0
Std Dv	1.0	1.1	2.0	1.5	1.6	1.9	2.2	2.9	0.3	0.2
TAKEOFF										
41	92.7	89.3	80.2	86.3	92.1	94.2	14.5	14.0	2.2	-1.5
43	92.5	89.1	80.0	85.3	92.3	94.2	24.5	19.5	2.0	-1.5
45	92.3	89.0	81.2	86.9	92.6	94.8	13.0	13.0	2.3	-1.6
47	92.2	89.0	80.4	86.1	91.5	93.7	13.5	14.5	2.2	-1.5
49	92.1	88.5	80.7	85.4	91.9	93.8	13.0	13.5	1.8	-1.6
51	92.4	89.2	80.9	85.8	92.1	94.0	14.5	15.0	2.2	-1.4
Avs.	92.4	89.0	80.6	86.0	92.1	94.1	15.5	14.9	2.1	-1.5
Std Dv	0.2	0.3	0.5	0.6	0.4	0.4	4.5	2.4	0.2	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS										
18	90.3	87.5	78.2	87.9	89.4	91.1	18.0	17.0	1.7	-1.1
19	89.6	87.2	79.5	86.6	90.9	92.3	13.0	13.0	1.5	-0.9
20	90.0	87.0	78.1	88.1	90.4	92.3	16.0	14.0	1.9	-1.1
21	89.6	87.1	79.5	86.5	90.6	92.0	12.5	12.5	1.4	-0.9
22	89.9	87.1	78.6	88.4	89.9	91.5	14.5	14.0	1.8	-1.2
23	89.3	86.9	79.1	85.6	90.2	91.5	12.5	12.0	1.3	-0.9
Avs.	89.8	87.1	78.8	87.2	90.3	91.8	14.4	13.7	1.6	-1.0
Std Dv	0.4	0.2	0.6	1.1	0.6	0.5	2.2	1.8	0.3	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS										
25	90.1	87.9	80.7	89.2	92.1	93.3	11.5	11.5	1.1	-0.7
26	90.1	87.6	78.9	91.3	90.3	91.9	14.5	14.0	1.6	-0.9
27	90.1	88.0	80.9	89.4	92.2	93.2	10.0	10.0	1.0	-0.7
28	90.2	87.7	79.3	91.4	90.8	92.2	13.5	13.5	1.4	-0.8
29	90.3	87.8	80.9	89.2	92.6	94.3	11.0	10.5	1.7	-0.8
Avs.	90.2	87.8	80.2	90.1	91.6	93.0	12.1	11.9	1.4	-0.8
Std Dv	0.1	0.2	1.0	1.1	1.0	1.0	1.9	1.8	0.3	0.1

TABLE NO. A.4-2.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/23/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 4 SIDELINE - 164 M. NORTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
10	93.4	89.6	82.9	100.6	95.0	96.3	9.5	10.0	1.6	-1.0
11	93.4	91.1	84.4	96.7	95.6	96.9	9.5	9.5	1.2	-0.8
16	93.5	89.9	83.7	99.4	96.1	97.3	8.5	8.5	1.2	-1.0
17	93.0	90.6	83.6	94.4	94.6	95.8	9.5	10.0	1.1	-1.0
Avg.	93.3	90.3	83.6	97.8	95.3	96.6	9.2	9.5	1.3	-0.9
Std Dv	0.2	0.7	0.6	2.8	0.6	0.7	0.5	0.7	0.2	0.1
700 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
8	91.1	88.5	80.0	97.2	92.1	92.3	13.5	15.0	0.2	-0.5
9	90.8	88.0	80.5	95.1	92.2	93.9	11.5	11.0	2.0	-1.1
14	89.8	87.2	79.2	95.8	90.4	91.6	13.5	14.5	1.3	-0.7
15	89.9	87.2	80.0	93.2	91.6	93.4	11.5	11.0	1.8	-1.1
Avg.	90.4	87.7	79.9	95.3	91.4	92.8	12.5	12.9	1.3	-0.9
Std Dv	0.7	0.6	0.5	1.7	0.8	1.0	1.2	2.2	0.8	0.3
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
1	88.6	85.7	77.7	91.7	87.9	90.1	14.5	14.5	2.1	-1.2
2	88.7	86.0	76.0	94.6	87.3	88.3	20.5	25.0	1.1	-0.6
3	89.1	86.6	77.4	92.3	88.7	90.3	15.5	15.0	1.9	-1.0
4	88.6	86.1	76.1	94.5	87.6	88.3	19.5	20.0	1.3	-0.7
52	87.1	84.7	75.2	93.6	86.7	87.4	21.5	21.5	0.6	-0.7
53	87.6	85.1	76.6	91.1	87.3	88.9	16.0	16.0	1.5	-1.0
54	87.5	84.9	76.2	93.3	87.5	88.4	20.0	20.0	0.9	-0.6
55	88.2	85.4	79.1	91.7	90.6	92.5	11.0	10.0	2.0	-1.2
Avg.	88.2	85.6	76.8	92.8	87.9	89.3	17.3	17.8	1.4	-0.9
Std Dv	0.7	0.7	1.2	1.4	1.2	1.6	3.6	4.8	0.5	0.3

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-3.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/23/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 4 SIDELINE - 164 M. NORTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
5	84.5	82.1	72.4	89.2	83.2	85.1	21.0	20.5	1.9	-1.2
6	86.4	84.0	72.9	91.2	84.6	85.9	30.0	31.5	1.3	-0.6
7	85.4	82.6	72.1	89.8	84.1	85.9	22.0	20.5	1.8	-1.2
12	88.0	85.5	74.8	93.9	86.0	86.9	24.5	30.5	0.9	-0.4
38	84.8	82.7	71.7	89.8	82.2	83.1	26.5	31.5	0.9	-0.7
39	84.9	82.4	73.3	86.3	83.7	85.8	22.0	21.5	2.0	-1.3
Avg.	85.7	83.2	72.9	90.0	84.0	85.4	24.3	26.0	1.5	-0.9
Std Dv	1.3	1.3	1.1	2.5	1.3	1.3	3.4	5.7	0.5	0.4
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
34	83.7	81.6	69.8	89.4	80.3	81.6	35.0	36.5	1.3	-0.7
35	83.4	81.0	70.2	85.9	80.5	82.2	26.0	27.0	1.7	-1.1
36	-	80.9	69.1	87.6	79.8	80.9	34.0	-	1.2	-
37	83.2	81.0	69.7	85.8	80.4	82.1	28.0	27.5	1.7	-1.1
Avg.	83.5	81.1	69.7	87.2	80.2	81.7	30.7	22.7	1.5	-1.0
Std Dv	0.2	0.3	0.4	1.7	0.3	0.6	4.4	15.8	0.3	0.3
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
30	-	79.2	66.7	86.2	76.8	78.1	37.0	-	1.3	-
31	79.7	77.4	68.2	84.9	78.8	80.5	25.5	25.5	1.9	-1.1
32	82.2	80.1	68.1	87.0	78.2	79.6	37.0	41.5	1.4	-0.8
33	81.3	78.9	69.0	84.1	78.6	79.9	24.5	31.0	1.3	-1.1
Avg.	81.1	78.9	68.0	85.5	78.1	79.5	31.0	24.5	1.5	-1.0
Std Dv	1.2	1.1	1.0	1.3	0.9	1.0	6.9	17.6	0.3	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-1.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/23/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
40	92.1	88.8	76.6	84.6	89.9	90.9	36.5	29.5	2.1	-0.8
42	92.6	89.8	79.5	85.1	90.5	92.1	33.0	32.5	2.2	-0.8
44	93.6	90.2	78.1	86.0	91.4	92.3	33.0	29.0	0.9	-0.8
46	93.5	90.2	77.4	85.1	90.0	91.2	33.5	32.5	1.2	-0.8
48	93.2	90.1	79.8	84.9	90.5	91.6	29.5	30.0	1.2	-0.8
50	92.8	90.1	78.2	85.2	90.1	91.3	35.5	25.0	1.6	-0.8
Avs.	93.0	89.9	78.3	85.2	90.4	91.6	33.5	29.7	1.5	-0.8
Std Dv	0.6	0.5	1.2	0.5	0.5	0.5	2.4	2.8	0.5	0.0
TAKEOFF										
41	88.7	86.4	78.0	83.7	89.1	90.5	13.5	13.5	1.4	-1.1
43	88.5	86.3	77.8	82.3	88.8	90.2	16.5	16.5	1.4	-1.1
45	90.1	87.9	80.7	85.0	91.2	92.4	11.5	13.0	1.5	-1.1
47	89.3	87.2	79.7	85.0	89.9	91.4	12.5	14.0	1.5	-1.0
49	89.3	87.2	79.6	84.8	90.4	91.5	11.5	12.5	1.2	-1.0
51	89.0	87.0	78.7	85.0	89.2	90.3	14.0	14.5	1.2	-1.0
Avs.	89.1	87.0	79.1	84.3	89.8	91.1	13.2	14.0	1.4	-1.1
Std Dv	0.5	0.6	1.1	1.1	0.9	0.9	1.9	1.4	0.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS										
18	89.8	87.6	78.0	84.5	89.2	90.5	21.5	18.0	1.4	-0.7
19	86.8	84.3	76.4	86.1	88.3	89.8	13.0	10.5	1.5	-1.0
20	90.3	88.2	77.9	84.6	89.2	90.6	21.5	20.0	1.4	-0.7
21	89.5	86.5	78.5	90.4	90.4	91.9	12.5	12.0	1.4	-1.0
22	89.6	87.5	79.1	84.8	90.2	91.4	16.5	14.0	1.2	-0.7
23	86.1	83.9	75.3	84.5	86.5	88.1	14.0	13.5	1.5	-0.8
Avs.	88.7	86.3	77.5	85.8	89.0	90.4	16.5	14.7	1.4	-0.8
Std Dv	1.8	1.8	1.4	2.3	1.4	1.3	4.1	3.6	0.1	0.1
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS										
24	90.1	87.7	79.0	86.0	90.2	91.6	17.5	17.0	1.5	-0.9
25	87.0	84.7	77.7	90.4	88.9	89.7	11.0	11.0	1.1	-0.8
26	91.0	88.8	79.8	86.3	90.6	92.0	16.5	16.5	1.4	-0.9
27	86.9	84.7	77.5	90.0	88.9	90.0	11.5	11.0	1.2	-0.8
28	90.6	88.6	79.4	86.1	90.6	91.9	17.0	17.0	1.4	-0.8
29	86.5	84.2	76.6	89.0	88.3	89.6	11.5	11.0	1.3	-0.7
Avs.	88.7	86.5	78.4	88.0	89.6	90.8	14.2	13.9	1.3	-0.8
Std Dv	2.1	2.1	1.3	2.1	1.0	1.1	3.1	3.2	0.1	0.0

TABLE NO. A.4-2.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/23/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
10	92.6	90.8	83.0	94.1	94.2	95.3	13.0	11.0	1.1	-0.5
11	89.7	86.7	80.7	96.3	93.1	94.1	8.0	8.0	1.0	-0.8
16	93.4	91.7	83.4	92.2	94.5	95.5	13.5	13.0	1.0	-0.7
17	90.5	87.6	81.4	96.0	93.5	94.7	9.0	8.0	1.2	-0.8
Avg.	91.6	89.2	82.1	94.7	93.8	94.9	10.9	10.0	1.1	-0.7
Std Dv	1.7	2.4	1.3	1.9	0.6	0.6	2.8	2.4	0.1	0.1
700 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
8	90.7	88.5	78.4	92.0	90.0	91.4	20.0	18.0	1.6	-0.9
9	86.4	84.2	76.1	93.2	87.3	87.8	12.5	13.0	0.7	-0.6
14	90.5	87.9	78.2	91.4	89.6	90.9	18.0	18.0	1.4	-0.9
15	86.6	84.1	76.7	93.3	88.6	89.0	11.5	12.5	0.6	-0.6
Avg.	88.6	86.2	77.4	92.5	88.8	89.8	15.5	15.4	1.1	-0.7
Std Dv	2.4	2.3	1.1	0.9	1.2	1.6	4.1	3.0	0.5	0.1
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
1	85.1	82.6	74.2	91.5	86.2	86.8	15.0	16.5	0.7	-0.5
2	88.4	86.0	75.1	90.0	86.2	87.8	23.5	22.5	1.6	-0.9
3	84.7	82.5	73.1	92.0	84.4	85.7	18.0	18.5	1.4	-0.6
4	88.5	85.9	75.4	90.3	86.7	88.3	21.0	20.5	1.6	-1.0
52	88.0	85.7	76.0	89.8	86.1	87.9	19.0	20.0	1.8	-1.1
53	85.3	83.1	74.9	90.8	86.2	86.9	16.0	18.5	0.9	-0.7
54	88.5	86.0	76.4	89.4	87.1	88.8	21.0	20.5	1.7	-1.1
55	85.0	82.6	74.1	91.0	85.9	86.3	23.0	22.5	0.6	-0.7
Avg.	86.7	84.3	74.9	90.6	86.1	87.3	19.6	19.9	1.3	-0.8
Std Dv	1.8	1.7	1.1	0.9	0.8	1.1	3.1	2.1	0.5	0.2

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-3.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
9/23/80

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
5	81.8	80.1	70.0	88.1	80.5	81.4	22.0	23.0	1.0	-0.6
6	85.0	83.0	71.9	86.7	82.8	84.2	26.5	26.5	1.4	-0.8
7	81.8	80.0	70.1	87.8	81.4	82.4	22.5	21.5	1.0	-0.5
12	85.3	82.9	72.1	88.0	82.2	84.0	25.0	30.5	1.8	-0.8
13	81.6	79.8	69.6	88.4	81.4	82.2	20.5	21.5	0.8	-0.5
38	84.6	82.5	72.0	85.7	82.2	83.6	22.5	27.0	2.0	-1.0
39	82.2	80.3	71.4	86.0	81.5	82.4	22.0	23.0	0.9	-0.7
Avg.	83.2	81.2	71.0	87.3	81.7	82.9	23.0	24.7	1.3	-0.7
Std Dv	1.7	1.5	1.1	1.1	0.7	1.1	2.0	3.4	0.5	0.2
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
34	83.2	80.8	69.7	86.1	79.5	81.4	27.5	42.0	1.9	-0.9
35	81.1	79.4	69.3	85.2	79.4	80.2	24.0	27.0	1.1	-0.6
36	82.4	80.3	68.9	84.4	79.1	80.5	29.0	31.5	2.1	-1.1
37	-	78.9	68.7	85.0	79.4	80.2	22.5	-	0.8	-
Avs.	82.2	79.9	69.2	85.2	79.4	80.6	25.7	25.1	1.5	-0.8
Std Dv	1.1	0.9	0.4	0.7	0.2	0.6	3.0	17.9	0.6	0.3
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS										
30	-	78.0	65.1	83.4	75.5	77.3	40.5	-	1.8	-
31	-	76.2	64.5	84.0	75.2	75.9	31.5	-	0.7	-
32	-	79.1	66.1	83.3	76.1	78.0	43.0	-	1.8	-
33	78.2	76.7	64.6	83.6	75.4	76.3	34.0	35.0	0.9	-0.5
Avg.	78.2	77.5	65.1	83.6	75.5	76.9	37.2	8.7	1.3	-0.5
Std Dv	-	1.3	0.7	0.3	0.4	1.0	5.4	17.5	0.6	-

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.4-1.50

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/ 2/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
40	95.3	92.2	80.9	88.0	93.0	93.8	29.5	29.0	0.9	-0.4
42	96.3	93.7	83.6	89.3	95.8	96.8	27.0	21.5	1.0	-0.5
44	97.0	93.8	83.0	89.7	95.3	96.4	28.5	28.0	1.1	-0.4
46	100.0	96.7	84.9	93.5	97.3	98.2	31.0	30.5	1.1	-0.5
48	96.7	93.9	83.0	88.8	94.4	95.1	24.5	25.0	0.7	-0.4
50	96.6	93.9	82.6	89.7	94.8	96.0	25.0	23.5	1.5	-0.5
Avg.	97.0	94.0	83.0	89.8	95.1	96.0	27.6	26.2	1.0	-0.5
Std Dv	1.6	1.4	1.3	1.9	1.4	1.5	2.6	3.5	0.3	0.0
TAKEOFF										
41	94.5	91.3	83.2	87.8	95.0	96.9	12.0	12.0	1.8	-1.5
43	94.6	91.5	83.4	87.0	94.1	96.1	14.0	14.5	2.1	-1.5
45	95.9	93.1	86.1	89.1	96.3	98.4	11.0	11.5	2.1	-1.6
47	95.4	92.5	85.5	88.9	95.7	97.8	11.0	13.5	2.1	-1.5
49	95.4	92.8	85.7	88.5	96.2	97.5	11.5	12.0	0.8	-1.5
51		----------		NO DATA		----------				
Avg.	95.1	92.3	84.8	88.3	95.5	97.3	11.9	12.7	1.8	-1.5
Std Dv	0.6	0.8	1.4	0.8	0.9	0.9	1.2	1.3	0.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
18	94.3	91.2	82.3	87.8	93.8	95.7	16.5	14.5	1.9	-1.0
19	91.6	88.9	81.4	87.6	93.2	94.6	11.5	10.5	1.4	-0.7
20	94.8	91.8	82.4	88.1	94.6	96.0	18.0	17.0	2.0	-0.9
21	91.8	89.3	82.0	87.7	93.6	94.7	10.5	10.5	1.0	-0.6
22	94.6	91.5	83.6	88.4	95.1	96.9	14.0	13.0	1.8	-1.0
23	91.0	88.6	80.7	86.3	92.2	93.6	11.5	11.5	1.4	-0.6
Avg.	93.0	90.2	82.1	87.6	93.7	95.2	13.7	12.8	1.6	-0.8
Std Dv	1.7	1.4	1.0	0.7	1.0	1.2	3.0	2.6	0.4	0.2
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
24	95.1	92.0	83.9	89.4	95.2	97.0	13.5	13.0	1.8	-1.0
25	92.3	89.9	83.5	91.9	94.9	95.9	9.5	10.0	1.0	-0.6
26	95.8	92.9	84.6	89.8	95.9	97.4	14.5	13.5	1.8	-0.9
27	92.2	89.7	83.0	91.1	94.7	95.7	10.0	10.0	1.0	-0.5
28	95.2	92.4	84.4	89.6	95.7	97.5	15.5	14.0	1.9	-0.8
29	92.0	89.6	82.4	90.4	94.1	95.1	11.0	11.0	1.0	-0.4
Avg.	93.8	91.1	83.6	90.3	95.1	96.4	12.3	11.9	1.4	-0.7
Std Dv	1.8	1.5	0.8	1.0	0.7	1.0	2.5	1.8	0.4	0.2

TABLE NO. A.4-2.5G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/ 2/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
10	97.8	94.8	87.8	95.5	99.8	101.0	9.5	9.0	1.4	-0.9
11	94.8	91.6	86.4	97.2	98.7	99.5	7.0	7.0	0.9	-0.5
16	97.4	94.1	87.1	93.6	99.6	100.7	9.5	9.5	1.0	-1.0
17	95.6	92.6	87.2	96.9	99.1	100.1	7.5	8.0	0.9	-0.5
Avg.	96.4	93.3	87.1	95.8	99.3	100.3	8.4	8.4	1.1	-0.7
Std Dv	1.4	1.4	0.6	1.7	0.5	0.7	1.3	1.1	0.2	0.2
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
8	95.4	92.5	83.9	93.9	95.6	97.2	14.5	13.5	1.9	-0.7
9	91.7	89.2	81.4	94.6	93.0	93.9	11.5	12.0	0.9	-0.7
14	94.5	91.7	82.6	93.1	94.4	95.8	15.0	13.5	1.5	-0.7
15	91.5	88.9	82.1	94.5	94.0	95.1	10.0	9.5	1.1	-0.5
Avg.	93.3	90.6	82.5	94.0	94.2	95.5	12.7	12.1	1.4	-0.7
Std Dv	2.0	1.8	1.0	0.7	1.1	1.4	2.4	1.9	0.4	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
1	89.9	87.5	78.8	92.6	91.2	91.9	14.5	14.0	0.9	-0.4
2	92.6	90.0	79.6	92.1	91.5	93.1	21.0	18.5	1.6	-0.7
3	89.7	87.5	78.5	93.4	90.1	90.9	16.0	16.5	0.8	-0.5
4	92.7	90.1	80.4	92.4	92.1	93.8	20.0	17.0	1.8	-0.7
52	92.4	89.9	80.6	92.2	92.2	93.6	17.0	16.0	1.3	-0.8
53	90.2	88.0	79.7	92.8	91.7	92.9	13.5	14.0	1.1	-0.4
54	92.8	90.1	81.7	91.7	93.3	94.6	19.5	19.0	1.3	-0.8
55	89.9	87.4	79.3	92.9	91.2	91.9	13.0	20.5	0.5	-0.6
Avg.	91.3	88.8	79.8	92.5	91.6	92.8	16.8	16.9	1.2	-0.6
Std Dv	1.4	1.3	1.1	0.5	0.9	1.2	3.1	2.3	0.4	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.4-3.5G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/13/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	86.6	84.9	74.9	89.4	86.3	87.2	20.0	19.5	1.1	-0.4
6	88.9	86.7	76.0	88.9	86.7	88.1	25.5	25.5	1.5	-0.7
7	86.5	84.6	75.2	89.2	86.7	87.5	18.0	18.0	0.7	-0.3
12	89.5	87.2	76.4	89.9	87.4	89.0	23.0	23.5	1.7	-0.7
13	86.1	84.3	75.7	89.6	87.1	87.9	16.5	15.5	0.7	-0.4
38	88.6	86.5	75.8	87.7	86.8	88.2	22.5	21.0	1.5	-0.7
39	86.6	84.8	76.1	87.0	87.2	88.3	20.0	20.0	1.1	-0.5
Avs.	87.5	85.6	75.7	88.8	86.9	88.0	20.8	20.4	1.2	-0.5
Std Dv	1.4	1.2	0.5	1.1	0.4	0.6	3.1	3.3	0.4	0.1
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
34	86.7	84.8	73.9	87.8	84.7	86.2	26.5	26.5	1.5	-0.5
35	84.9	83.4	72.9	86.0	83.6	84.7	23.0	23.0	1.1	-0.5
36	86.1	84.1	72.9	85.9	83.6	85.2	28.5	26.5	1.6	-0.7
37	84.6	83.1	72.3	85.9	82.8	83.9	23.5	24.5	1.1	-0.4
Avs.	85.6	83.6	73.0	86.4	83.7	85.0	25.4	25.1	1.3	-0.5
Std Dv	1.0	0.8	0.6	0.9	0.8	1.0	2.6	1.7	0.3	0.2
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
30	84.2	82.2	69.9	85.1	80.2	81.9	36.5	37.0	1.7	-0.8
31	82.2	80.7	69.5	85.2	80.1	80.8	25.5	29.0	0.7	-0.4
32	-	83.0	70.7	85.1	80.9	82.4	34.5	-	1.5	-
33	82.2	80.9	70.1	84.8	80.5	81.5	30.5	31.0	1.0	-0.4
Avs.	82.9	81.7	70.1	85.1	80.4	81.6	31.7	24.2	1.3	-0.5
Std Dv	1.2	1.1	0.5	0.2	0.4	0.7	4.9	16.5	0.5	0.2

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-1.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/ 2/81

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH										
40	89.8	87.2	77.0	82.8	88.3	88.9	33.5	37.0	0.8	-0.6
42	90.1	87.8	78.5	83.1	89.5	90.7	32.5	33.0	1.2	-0.4
44	90.5	88.3	76.6	82.3	87.8	88.6	35.0	35.0	0.8	-0.4
46	90.9	88.7	79.0	83.7	89.9	91.1	33.0	33.5	1.2	-0.4
48	88.7	86.1	74.8	81.9	86.9	87.5	34.5	34.5	0.6	-0.5
50	88.4	85.9	74.4	81.3	85.2	86.3	42.5	42.5	1.1	-0.5
Avg.	89.7	87.3	76.7	82.5	87.9	88.8	35.2	35.9	1.0	-0.5
Std Dv	1.0	1.1	1.9	0.9	1.7	1.9	3.7	3.5	0.3	0.1
TAKEOFF										
41	89.4	85.6	74.8	82.0	88.0	89.8	27.5	21.0	2.0	-1.5
43	88.7	85.0	74.1	80.7	87.4	89.3	30.5	19.5	1.9	-1.3
45	88.9	85.7	74.8	82.4	86.6	88.8	27.5	23.0	2.1	-1.3
47	89.6	86.1	76.7	82.3	87.4	89.6	22.5	19.5	2.2	-1.5
49	88.1	84.3	75.3	81.5	86.0	88.1	18.0	20.0	2.3	-1.6
51	88.7	85.2	75.6	81.9	87.3	89.2	26.0	17.5	2.1	-1.6
Avg.	88.9	85.3	75.2	81.8	87.1	89.1	25.3	20.1	2.1	-1.5
Std Dv	0.6	0.6	0.9	0.6	0.7	0.6	4.4	1.8	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS										
18	86.1	83.3	73.2	82.9	85.1	87.1	25.0	23.0	2.2	-0.9
19	86.6	84.4	75.3	81.9	86.0	87.0	18.0	18.0	1.5	-0.7
20	85.6	82.7	72.1	82.8	83.7	85.6	25.5	22.5	2.2	-0.8
21	86.7	84.4	75.4	82.0	86.4	87.9	17.5	17.0	1.4	-0.8
22	85.6	82.7	73.0	83.1	84.4	86.1	21.0	21.0	1.7	-0.9
23	86.0	83.8	74.2	81.2	85.1	86.3	19.5	19.5	1.2	-0.6
Avg.	86.1	83.6	73.9	82.3	85.1	86.7	21.1	20.2	1.7	-0.8
Std Dv	0.5	0.8	1.3	0.7	1.0	0.8	3.5	2.4	0.4	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS										
24	86.6	84.3	75.1	86.0	86.6	87.6	19.5	19.0	1.1	-0.6
25	87.6	85.8	77.7	85.4	88.5	89.4	16.5	16.5	0.9	-0.6
26	86.9	84.2	75.6	85.6	87.2	88.7	19.0	18.0	1.6	-0.9
27	87.8	85.7	77.1	84.9	88.2	89.3	14.5	14.5	1.1	-0.6
28	87.1	84.2	74.6	85.8	86.4	87.6	20.0	20.0	1.6	-0.9
29	88.0	85.9	78.1	85.7	89.0	89.8	14.0	14.0	0.8	-0.7
Avg.	87.3	85.0	76.3	85.5	87.6	88.7	17.2	17.0	1.2	-0.7
Std Dv	0.5	0.9	1.5	0.4	1.1	0.9	2.6	2.4	0.3	0.1

TABLE NO. A.4-2.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
1/ 2/81

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
10		----------		NO DATA		----------				
11	89.5	86.9	79.1	89.2	90.3	92.5	12.5	11.5	2.2	-1.0
16	88.4	85.1	77.1	92.3	89.0	90.0	13.0	13.5	1.0	-0.5
17	89.3	86.7	78.5	87.9	89.6	91.5	13.5	13.0	1.9	-1.0
Avs.	89.1	86.2	78.2	89.8	89.6	91.3	13.0	12.7	1.7	-0.9
Std Dv	0.6	1.0	1.0	2.3	0.6	1.2	0.5	1.0	0.6	0.3
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
8	87.7	84.7	76.1	93.1	88.1	89.6	16.0	16.0	1.6	-0.9
9	88.3	86.1	76.8	91.4	88.0	90.1	14.0	13.0	2.1	-1.0
14	86.8	83.4	73.9	91.7	86.8	88.5	18.5	17.5	1.7	-0.7
15	87.9	85.0	77.0	90.6	88.9	91.1	14.0	13.0	2.2	-1.2
Avs.	87.7	84.8	76.0	91.7	87.9	89.8	15.6	14.9	1.9	-1.0
Std Dv	0.6	1.1	1.4	1.0	0.9	1.1	2.1	2.2	0.3	0.2
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
1	86.6	84.0	74.5	88.9	85.4	86.9	19.0	19.0	1.6	-0.9
2	86.1	83.3	72.8	91.3	85.2	86.7	22.0	22.0	1.6	-0.7
3	87.1	84.8	74.9	89.7	85.8	87.4	19.0	18.0	1.7	-1.0
4	86.1	83.3	73.0	91.6	85.1	86.8	21.5	22.5	1.6	-0.9
52	86.2	83.3	73.6	90.9	85.4	86.6	21.0	20.5	1.2	-0.9
53	86.6	84.0	74.9	89.3	86.7	87.9	20.0	19.5	1.2	-0.9
54	86.2	83.1	73.0	91.1	84.7	85.9	23.5	27.5	1.5	-0.8
55	87.9	85.3	77.9	89.7	87.5	90.2	13.5	13.5	2.7	-0.9
Avs.	86.6	83.9	74.3	90.3	85.7	87.3	19.9	20.3	1.6	-0.9
Std Dv	0.6	0.8	1.7	1.0	0.9	1.3	3.0	4.0	0.5	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.4-3.6

DOT/TSC
1/ 2/81

SIKORSKY S-76 SPIRIT HELICOPTER

SUMMARY NOISE LEVEL DATA - MAIN ROTOR RPM 107%

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
5	83.3	81.0	70.3	87.5	80.7	82.8	23.5	23.0	2.0	-1.2
6	-	81.4	69.2	88.6	80.8	82.2	36.0	-	1.4	-
7	-	80.9	71.7	88.0	81.9	83.9	18.0	-	2.0	-
12	83.7	81.1	70.0	89.8	81.7	83.3	27.5	26.5	1.6	-0.5
13	83.2	80.3	70.1	88.2	82.0	83.6	24.0	19.5	1.9	-1.4
38	84.3	81.4	69.7	88.3	81.4	82.8	28.0	32.0	1.4	-0.5
39	84.4	81.9	71.1	85.6	82.3	83.7	24.0	24.0	1.5	-1.1
Avg.	83.8	81.1	70.3	88.0	81.5	83.2	25.9	17.9	1.7	-1.0
Std Dv	0.6	0.5	0.8	1.3	0.6	0.6	5.5	12.8	0.3	0.4
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
34	82.8	80.3	69.9	88.7	81.0	82.3	25.5	30.0	1.3	-0.6
35	83.1	80.7	69.4	85.5	80.1	81.5	28.0	28.0	1.4	-1.1
36	82.6	79.7	68.6	86.9	79.1	80.3	30.5	49.5	1.2	-0.4
37	82.6	79.9	69.1	86.1	80.0	81.3	29.0	31.5	1.3	-1.2
Avg.	82.8	80.2	69.3	86.8	80.0	81.4	28.2	34.7	1.3	-0.8
Std Dv	0.[illegible]	0.5	0.6	1.4	0.8	0.8	2.1	9.9	0.1	0.4
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS										
30	80.5	78.2	66.9	85.1	77.2	78.2	35.5	45.0	1.0	-0.5
31	80.5	77.8	67.1	85.1	78.3	79.7	32.5	3[illegible]	1.4	-1.1
32	81.3	79.0	68.1	85.7	77.9	78.9	33.5	42.0	1.0	-0.5
33	81.6	79.2	68.8	83.9	78.9	80.5	27.5	30.0	1.5	-1.2
Avg.	81.0	78.6	67.7	85.0	78.1	79.3	32.2	37.4	1.2	-0.8
Std Dv	0.6	0.7	0.9	0.8	0.7	1.0	3.4	7.2	0.3	0.4

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.5-2.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
56	99.7	96.0	90.6	101.7	102.9	103.9	6.5	7.5	1.0	-0.6
57	99.1	95.2	90.1	100.4	102.8	103.4	7.0	10.0	0.9	-0.5
58	100.1	96.7	91.2	101.5	104.0	104.8	6.0	6.5	0.7	-0.6
59	98.7	95.2	89.0	100.2	101.4	102.3	7.5	9.0	1.2	-0.6
Avg.	99.4	95.8	90.2	101.0	102.8	103.6	6.7	8.2	1.0	-0.6
Std Dv	0.6	0.7	0.9	0.8	1.1	1.0	0.6	1.6	0.2	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
60	95.2	92.2	84.7	94.7	95.9	96.9	11.5	12.0	1.2	-0.7
61	94.7	91.5	83.1	93.1	94.8	95.9	13.5	22.5	1.1	-0.7
62	93.8	90.5	83.3	92.5	94.4	95.4	16.5	17.0	1.1	-0.7
63	94.8	91.8	82.7	93.8	94.4	95.7	14.5	15.0	1.3	-0.7
Avg.	94.6	91.5	83.4	93.5	94.9	96.0	14.0	16.6	1.2	-0.7
Std Dv	0.6	0.7	0.9	0.9	0.7	0.6	2.1	4.4	0.1	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
64	92.6	89.6	81.2	92.2	92.8	94.2	17.0	16.5	1.4	-0.7
65	-	89.1	79.8	90.6	90.9	92.0	19.5	-	1.6	-
66	91.2	88.3	78.6	90.1	90.4	91.0	21.0	21.5	0.7	-0.6
67	91.3	88.5	77.8	90.8	90.4	91.7	21.0	19.5	1.7	-0.7
Avg.	91.7	88.9	79.4	90.9	91.1	92.2	19.6	14.4	1.3	-0.7
Std Dv	0.8	0.6	1.5	0.9	1.1	1.4	1.9	9.8	0.5	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-3.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
68	87.8	84.9	74.4	88.4	86.1	87.4	22.0	21.5	1.3	-0.7
69	89.6	86.7	78.6	90.4	90.1	91.1	20.0	23.5	1.0	-0.4
70	89.7	86.5	75.8	88.2	86.9	88.7	27.0	28.0	1.8	-0.8
71	90.3	86.9	77.8	89.2	89.2	90.0	20.5	35.5	1.6	-0.7
Avg.	89.3	86.2	76.6	89.1	88.1	89.3	22.4	27.1	1.4	-0.6
Std Dv	1.1	0.9	1.9	1.0	1.9	1.6	3.2	6.2	0.3	0.2
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
72	88.3	85.6	76.1	87.4	87.1	89.0	22.5	22.5	2.3	-0.9
73	86.3	83.9	71.5	86.3	83.0	84.5	36.5	33.5	1.5	-0.8
74	-	83.8	73.7	85.9	84.5	85.5	33.5	-	1.2	-
75	88.7	86.4	75.7	86.1	85.4	86.5	30.0	37.5	1.1	-0.9
Avg.	87.8	84.9	74.3	86.4	85.0	86.4	30.6	23.4	1.5	-0.9
Std Dv	1.3	1.3	2.1	0.7	1.7	1.9	6.0	16.8	0.5	0.1
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
76	86.7	84.5	73.0	83.4	83.8	84.6	40.5	37.5	0.9	-1.0
77	87.2	84.7	73.5	85.1	83.1	84.5	39.5	49.0	2.2	-0.9
Avg.	86.9	84.6	73.2	84.2	83.4	84.6	40.0	43.2	1.5	-0.9
Std Dv	0.4	0.1	0.3	1.2	0.4	0.1	0.7	8.1	0.9	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-2.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE-CENTER (FLUSH) JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
56	103.5	99.9	95.2	104.8	107.3	108.0	6.0	7.0	0.8	-0.5
57	102.9	99.2	94.5	103.3	107.1	107.9	6.5	7.5	0.8	-0.5
58	104.1	100.6	95.0	105.0	108.0	109.2	6.5	6.0	1.2	-0.5
59	102.7	98.8	93.3	103.5	105.9	106.8	7.0	8.0	1.2	-0.5
Avg.	103.3	99.6	94.5	104.2	107.1	108.0	6.5	7.1	1.0	-0.5
Std Dv	0.6	0.8	0.8	0.9	0.9	1.0	0.4	0.9	0.3	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
60	99.5	96.2	89.9	98.6	100.7	102.1	9.5	10.5	1.5	-0.6
61	99.3	95.8	87.3	97.5	99.8	100.9	13.5	13.5	1.1	-0.6
62	98.4	94.4	88.0	97.7	99.2	100.7	10.5	16.0	1.4	-0.5
63	99.1	95.5	86.6	97.7	99.5	100.6	14.5	14.5	1.2	-0.6
Avg.	99.1	95.5	87.9	97.9	99.8	101.1	12.0	13.6	1.3	-0.6
Std Dv	0.5	0.8	1.4	0.5	0.7	0.7	2.4	2.3	0.2	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
64	96.5	93.1	84.9	95.3	96.9	98.1	16.5	15.5	1.2	-0.3
65	96.5	93.0	83.8	94.9	95.3	96.7	19.5	21.5	1.4	-0.6
66	95.8	92.4	83.5	93.9	95.4	96.6	20.5	20.5	1.1	-0.4
67	95.4	92.3	81.7	93.5	94.5	95.8	23.0	19.0	1.6	-0.7
Avg.	96.0	92.7	83.5	94.4	95.5	96.8	19.9	19.1	1.3	-0.5
Std Dv	0.5	0.4	1.3	0.9	1.0	0.9	2.7	2.6	0.2	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.5-3.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G CENTERLINE-CENTER (FLUSH) JUNE 25,1980

1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
68	92.5	89.1	78.7	91.2	90.4	91.7	21.0	20.5	1.5	-0.5
69	93.4	90.2	80.3	92.7	92.5	93.2	24.0	25.0	0.7	-0.6
70	93.9	90.5	79.7	90.7	91.5	92.6	26.5	27.0	1.5	-0.5
71	94.3	90.7	81.2	91.8	93.2	94.2	21.0	34.5	1.0	-0.6
Avg.	93.5	90.1	80.0	91.6	91.9	93.0	23.1	26.7	1.2	-0.5
Std Dv	0.8	0.7	1.0	0.9	1.2	1.0	2.7	5.8	0.4	0.1

2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
72	92.2	89.4	78.9	90.4	90.6	91.4	23.0	23.0	0.9	-0.5
73	90.4	87.7	75.9	88.9	87.2	88.5	36.0	33.5	1.3	-0.5
74	-	87.6	77.1	88.5	88.6	89.6	33.0	-	1.0	-
75	91.2	88.0	76.6	88.6	87.8	89.5	37.0	36.5	1.7	-0.6
Avg.	91.3	88.2	77.1	89.1	88.6	89.8	32.2	23.3	1.2	-0.5
Std Dv	0.9	0.8	1.3	0.9	1.4	1.2	6.4	16.5	0.3	0.1

2500 FT, FLYOVER - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
76	89.2	86.2	74.4	86.0	85.6	86.8	40.5	37.0	1.4	-0.5
77	89.5	86.3	74.0	87.5	85.9	86.8	41.5	41.5	0.9	-0.7
Avg.	89.3	86.3	74.2	86.8	85.7	86.8	41.0	39.2	1.2	-0.6
Std Dv	0.2	0.1	0.3	1.0	0.2	0.0	0.7	3.2	0.4	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-2.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H　　CENTERLINE-CENTER (10-METER)　　JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
56	101.7	97.8	92.2	103.1	105.1	106.0	7.5	8.0	0.9	-0.6
57	101.0	97.1	91.9	102.1	104.5	105.4	7.0	8.0	0.9	-0.7
58	102.0	98.5	93.2	103.3	105.9	106.9	6.0	6.5	1.0	-0.6
59	101.0	96.9	90.7	101.8	103.8	105.2	8.0	8.5	1.3	-0.7
Avg.	101.4	97.5	92.0	102.6	104.8	105.9	7.1	7.7	1.0	-0.7
Std Dv	0.5	0.7	1.0	0.7	0.9	0.8	0.9	0.9	0.2	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
60	97.2	93.9	86.2	96.4	98.3	99.9	11.5	11.0	1.7	-0.8
61	97.1	93.6	85.2	96.0	97.7	99.4	13.5	13.5	1.7	-0.7
62	96.4	92.5	84.9	95.8	97.0	97.7	16.5	17.0	0.8	-0.7
63	97.5	93.8	85.2	96.4	97.7	99.4	15.0	14.0	1.7	-0.9
Avg.	97.1	93.5	85.4	96.1	97.7	99.1	14.1	13.9	1.4	-0.8
Std Dv	0.5	0.6	0.6	0.3	0.5	1.0	2.1	2.5	0.5	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
64	94.5	91.2	82.1	94.1	94.6	96.2	17.5	16.0	1.6	-0.7
65	94.3	90.7	81.2	92.3	92.8	94.3	20.0	21.5	1.5	-0.9
66	93.1	89.7	80.6	91.4	92.7	93.5	21.0	21.0	0.9	-0.7
67	93.6	90.2	80.1	92.0	92.6	94.1	20.5	20.0	1.6	-0.9
Avg.	93.9	90.5	81.0	92.5	93.2	94.5	19.7	19.6	1.4	-0.8
Std Dv	0.6	0.6	0.9	1.1	1.0	1.1	1.6	2.5	0.4	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-3.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H   CENTERLINE-CENTER (10-METER)   JUNE 25,1980

1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
68	90.5	87.0	76.6	90.8	88.2	90.0	21.0	20.5	2.0	-0.8
69	-	88.2	78.2	90.8	90.3	90.7	25.5	-	0.3	-
70	91.9	88.5	78.6	89.6	90.6	92.1	27.0	26.0	1.5	-0.8
71	92.0	88.5	77.3	90.6	89.8	91.7	31.5	30.5	1.9	-0.7
Avg.	91.5	88.1	77.7	90.4	89.7	91.1	26.2	19.2	1.4	-0.8
Std Dv	0.8	0.7	0.9	0.6	1.1	1.0	4.3	13.5	0.8	0.0

2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
72	90.1	87.3	76.8	89.1	88.5	90.2	24.5	23.0	1.6	-0.7
73	88.6	85.5	73.5	87.8	85.3	87.2	35.5	34.0	1.9	-0.9
74	-	85.8	75.0	86.6	86.7	88.4	34.0	-	1.7	-
75	89.2	86.0	73.4	86.9	86.0	87.9	39.5	37.0	1.9	-0.9
Avg.	89.3	86.1	74.7	87.6	86.6	88.4	33.4	23.5	1.8	-0.8
Std Dv	0.8	0.8	1.6	1.1	1.4	1.3	6.4	16.8	0.1	0.1

2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
76	87.3	83.9	73.0	85.4	84.3	85.6	36.5	43.0	1.3	-0.9
77	-	84.4	71.5	86.8	83.5	85.3	41.0	-	1.8	-
Avg.	87.3	84.2	72.2	86.1	83.9	85.4	38.7	21.5	1.5	-0.9
Std Dv	-	0.3	1.0	1.0	0.6	0.2	3.2	30.4	0.4	-

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-2.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/30/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1960

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
56	99.4	95.9	90.9	101.4	102.7	103.4	6.5	7.0	1.0	-0.7
57	98.7	94.6	90.2	100.5	102.9	103.5	6.0	8.0	0.6	-0.6
58	98.6	95.0	90.2	100.5	102.5	103.3	6.0	7.0	0.8	-0.6
59	98.4	94.4	88.6	101.1	101.6	102.6	7.0	7.5	1.1	-0.6
Avg.	98.8	95.0	90.0	100.8	102.4	103.2	6.4	7.4	0.9	-0.6
Std Dv	0.4	0.7	0.9	0.4	0.6	0.4	0.5	0.5	0.3	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
60	-	93.2	84.5	95.3	96.9	98.2	14.0	-	2.0	-
61	94.7	91.3	82.5	94.1	95.0	96.2	16.0	16.0	1.3	-0.6
62	95.0	91.8	83.5	93.7	95.1	96.3	14.0	15.0	1.1	-0.6
63	94.5	91.0	81.7	93.6	93.9	95.4	17.5	17.5	1.5	-0.7
Avg.	94.7	91.8	83.1	94.2	95.2	96.5	15.4	12.1	1.5	-0.7
Std Dv	0.3	1.0	1.2	0.8	1.2	1.2	1.7	8.1	0.4	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
64	91.8	88.9	81.1	91.5	92.9	93.8	15.0	14.5	0.9	-0.7
65	92.3	89.0	79.8	91.2	92.0	93.0	21.0	21.0	1.0	-0.7
66	90.7	87.4	77.8	90.1	89.5	90.9	17.0	17.5	1.4	-0.8
67	91.4	88.2	78.6	90.9	90.3	91.2	20.0	21.5	1.2	-0.8
Avg.	91.6	88.4	79.3	90.9	91.2	92.3	18.2	18.6	1.1	-0.8
Std Dv	0.7	0.8	1.4	0.6	1.5	1.4	2.8	3.3	0.2	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-3.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/30/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
68	87.5	84.8	74.7	87.1	85.8	87.3	20.0	19.5	1.5	-0.8
69	88.8	85.8	74.3	88.1	85.9	87.1	30.5	31.5	1.2	-0.6
70	88.9	85.6	75.1	87.6	87.1	88.3	25.0	26.0	1.2	-0.7
71	89.4	86.0	74.9	88.6	86.7	88.1	26.0	33.5	1.7	-0.7
Avg.	88.7	85.6	74.7	87.8	86.4	87.7	25.4	27.6	1.4	-0.7
Std Dv	0.6	0.5	0.4	0.6	0.7	0.6	4.3	6.3	0.3	0.1
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
72	87.8	85.2	75.4	87.4	86.8	87.8	27.0	26.5	1.0	-0.8
73	-	83.6	72.0	85.3	83.6	84.8	36.0	-	1.2	-
74	86.3	83.6	72.0	85.7	82.9	84.1	30.5	29.0	1.2	-0.7
75	86.6	83.7	71.4	86.2	83.1	84.7	33.5	34.0	1.7	-0.7
Avg.	86.9	84.0	72.7	86.2	84.1	85.3	31.7	22.4	1.3	-0.7
Std Dv	0.8	0.8	1.8	0.9	1.8	1.7	3.9	15.2	0.3	0.1
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
76	85.1	82.2	71.5	83.9	82.6	84.6	38.5	39.5	2.0	-0.8
77	-	81.9	69.6	84.6	80.7	81.8	37.5	-	1.5	-
Avg.	85.1	82.0	70.5	84.2	81.7	83.2	38.0	19.7	1.7	-0.8
Std Dv	-	0.2	1.4	0.5	1.3	2.0	0.7	27.9	0.3	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-2.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
1/ 5/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
56	100.1	96.4	90.5	101.6	103.0	104.0	7.0	7.0	1.1	-0.8
57	99.6	95.3	89.5	101.3	102.8	103.9	8.5	8.0	1.3	-0.7
58	99.9	96.5	89.7	101.5	102.3	103.3	8.5	8.5	1.0	-0.7
59	99.6	95.5	89.4	101.7	101.9	103.2	7.5	9.0	1.3	-0.7
Avg.	99.8	95.9	89.8	101.6	102.5	103.6	7.9	8.1	1.2	-0.7
Std Dv	0.2	0.6	0.5	0.2	0.5	0.4	0.7	0.9	0.2	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
60	94.8	91.3	83.5	95.5	95.6	96.6	13.0	13.5	0.9	-0.7
61	95.2	91.6	83.1	95.2	95.	96.4	15.0	20.5	1.4	-0.7
62	94.3	90.8	83.5	95.4	95.	96.8	12.5	12.5	1.4	-0.9
63	95.4	91.9	82.8	96.8	95.	96.6	13.5	13.5	1.0	-0.7
Avg.	94.9	91.4	83.2	95.7	95.4	96.6	13.5	15.0	1.2	-0.7
Std Dv	0.5	0.5	0.3	0.7	0.2	0.1	1.1	3.7	0.2	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
64	92.6	89.4	81.6	92.9	93.1	94.5	18.5	18.0	1.7	-0.9
65	92.8	89.3	79.2	92.7	91.6	92.9	25.5	25.0	1.2	-0.7
66	91.7	88.5	79.5	92.0	91.2	92.5	23.0	23.0	1.2	-0.7
67	91.3	88.1	78.7	92.1	90.6	92.2	18.0	18.0	1.6	-0.8
Avg.	92.1	88.8	79.8	92.4	91.6	93.0	21.2	21.0	1.4	-0.8
Std Dv	0.7	0.6	1.3	0.5	1.0	1.0	3.6	3.6	0.2	0.1

* - INDEXES (A.D. ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ =THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-3.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
1/ 5/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
68	88.5	85.6	75.4	88.1	86.6	87.9	23.0	23.5	1.4	-0.6
69	89.8	86.5	76.3	90.0	87.9	88.9	36.0	37.0	1.1	-0.8
70	88.8	85.6	75.1	88.8	86.9	87.9	31.5	31.0	1.0	-0.7
71	90.2	86.6	78.3	90.2	89.9	90.8	27.0	32.5	0.9	-0.7
Avs.	89.3	86.1	76.3	89.3	87.8	88.9	29.4	31.0	1.1	-0.7
Std Dv	0.8	0.6	1.4	1.0	1.5	1.4	5.6	5.6	0.2	0.1
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
72	88.2	85.3	73.6	87.9	85.2	86.5	30.5	30.5	1.3	-0.9
73	87.3	84.4	72.3	86.5	83.6	84.3	49.5	50.0	0.7	-0.7
74	87.7	84.8	74.4	87.1	86.0	87.5	38.0	37.0	1.5	-0.9
75	87.1	84.2	75.1	87.6	86.5	88.0	26.0	24.5	1.5	-0.9
Avs.	87.6	84.7	73.9	87.3	85.3	86.6	36.0	35.5	1.3	-0.8
Std Dv	0.5	0.5	1.2	0.6	1.3	1.6	10.3	10.9	0.4	0.1
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
76	85.9	82.8	70.5	85.9	82.3	83.8	42.0	42.0	1.5	-0.9
77	-	83.0	69.8	86.4	81.3	83.1	48.5	-	1.8	-
Avs.	85.9	82.9	70.2	86.1	81.8	83.4	45.2	21.0	1.7	-0.9
Std Dv	-	0.1	0.5	0.4	0.7	0.5	4.6	29.7	0.2	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-2.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE -164M. NORTH JUNE 25,1980

300 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
56	97.6	93.6	87.9	95.2	99.3	101.1	8.5	9.5	1.8	-1.0
57	98.9	95.6	89.5	96.9	100.7	103.1	9.0	10.0	2.3	-0.9
58	97.3	93.4	87.3	95.4	98.6	100.3	8.5	11.0	1.9	-1.1
59	99.5	96.1	89.3	98.7	100.4	101.5	11.0	12.0	1.2	-0.7
Avg.	98.3	94.7	88.5	96.5	99.8	101.5	9.2	10.6	1.8	-0.9
Std Dv	1.1	1.4	1.1	1.6	1.0	1.2	1.2	1.1	0.5	0.2

700 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
60	96.0	93.1	84.0	95.6	96.0	97.1	15.5	15.0	1.1	-0.9
61	96.2	93.3	84.6	94.9	95.6	96.4	16.0	20.5	1.1	-0.7
62	95.4	92.1	84.3	94.5	95.6	96.7	17.0	18.0	1.1	-0.7
63	95.3	92.6	83.6	94.6	94.8	95.5	14.5	17.0	0.6	-0.4
Avg.	95.7	92.8	84.1	94.9	95.5	96.4	15.7	17.6	1.0	-0.7
Std Dv	0.4	0.5	0.4	0.5	0.5	0.7	1.0	2.3	0.2	0.2

1000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
64	96.1	93.5	84.9	94.2	96.2	97.8	15.0	15.0	1.6	-0.9
65	94.4	91.0	81.1	94.3	92.6	94.0	19.0	27.0	1.4	-0.5
66	95.6	92.7	84.2	93.4	94.6	95.7	17.0	22.5	1.1	-0.9
67	-	90.4	80.3	93.2	91.6	92.9	21.5	-	1.4	-
Avg.	95.4	91.9	82.6	93.8	93.8	95.1	18.1	16.1	1.4	-0.8
Std Dv	0.9	1.4	2.3	0.6	2.0	2.1	2.8	11.8	0.2	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-3.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
10/14/80

SITE: 4 SIDELINE -164M. NORTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS										
68	92.4	90.0	82.1	90.9	91.9	93.1	17.0	19.5	1.2	-0.9
69	91.6	88.4	77.2	92.5	89.5	90.8	33.0	32.0	1.3	-0.6
70	92.6	90.1	81.4	90.6	91.0	92.2	19.5	20.5	1.2	-0.9
71	91.8	88.7	77.4	92.3	88.6	89.7	38.0	39.0	1.1	-0.6
Avs.	92.1	89.3	79.5	91.5	90.3	91.4	26.9	27.7	1.2	-0.8
Std Dv	0.5	0.9	2.6	1.0	1.5	1.5	10.2	9.4	0.1	0.1
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS										
72	91.5	89.0	77.9	89.2	89.4	90.5	33.5	35.5	1.1	-0.7
73	88.6	85.8	74.3	88.0	85.5	86.7	39.5	44.0	1.2	-0.6
74	90.4	88.3	78.0	89.1	88.9	90.1	25.5	26.0	1.2	-0.7
75	88.4	85.6	75.0	88.1	85.4	86.3	35.5	39.0	0.9	-0.5
Avs.	89.7	87.2	76.3	88.6	87.3	88.4	33.5	36.1	1.1	-0.6
Std Dv	1.5	1.7	1.9	0.6	2.1	2.2	5.9	7.6	0.2	0.1
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS										
76	88.1	85.8	75.3	86.7	85.2	86.3	34.5	39.5	1.0	-0.7
77	-	84.0	71.8	87.0	83.2	84.4	40.5	-	1.2	-
Avs.	88.1	84.9	73.8	86.9	84.2	85.3	37.5	19.7	1.1	-0.7
Std Dv	-	1.3	2.8	0.2	1.5	1.3	4.2	27.9	0.2	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE, HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO.A.5-2.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 25,1980

300 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
56	98.1	94.7	89.3	97.8	100.7	101.9	8.0	9.5	1.2	-0.8
57	98.0	94.5	88.1	96.6	99.4	100.8	11.0	11.0	1.6	-1.1
58	97.9	94.8	89.2	96.2	100.7	101.8	7.5	8.5	1.0	-0.9
59	98.1	94.4	87.1	96.2	98.7	100.6	11.5	12.0	1.9	-1.1
Avs.	98.0	94.6	88.4	96.7	99.9	101.3	9.5	10.2	1.4	-0.9
Std Dv	0.1	0.2	1.1	0.8	1.0	0.7	2.0	1.6	0.4	0.2

700 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
60	94.9	91.6	84.0	94.1	96.0	96.9	15.5	15.5	0.9	-0.5
61	-	94.4	85.2	95.0	96.8	97.9	16.0	-	1.1	-
62	93.6	90.3	82.9	93.2	94.7	95.4	13.0	13.5	0.8	-0.6
63	96.8	94.1	86.3	94.8	96.9	98.1	16.0	16.5	1.3	-0.8
Avs.	95.1	92.6	84.6	94.3	96.1	97.1	15.1	11.4	1.0	-0.6
Std Dv	1.6	2.0	1.5	0.8	1.0	1.2	1.4	7.7	0.2	0.2

1000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
64		----------		NO DATA		----------				
65	95.7	93.1	84.9	92.9	95.2	96.2	16.5	23.0	1.0	-0.8
66	92.1	89.5	80.4	90.6	92.0	92.7	16.0	16.5	0.9	-0.7
67	94.9	92.4	83.6	92.9	93.5	94.7	18.5	19.5	1.3	-0.8
Avs.	94.2	91.6	83.0	92.1	93.5	94.5	17.0	19.7	1.1	-0.8
Std Dv	1.9	1.9	2.3	1.3	1.6	1.7	1.3	3.3	0.2	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-3.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
10/14/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS										
68	89.2	86.6	78.2	88.8	89.5	90.2	20.5	21.5	0.3	-0.6
69	91.9	89.6	80.3	90.1	89.8	91.1	25.0	25.0	1.3	-0.8
70	88.9	86.2	76.9	87.9	88.1	88.9	21.0	29.0	0.5	-0.7
71	92.6	90.0	82.1	90.7	91.9	93.0	21.5	24.5	1.1	-0.8
Avs.	90.6	88.1	79.3	89.4	89.8	90.8	22.0	25.0	0.8	-0.7
Std Dv	1.9	2.0	2.3	1.3	1.6	1.7	2.0	3.1	0.5	0.1
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS										
72	87.3	84.6	73.5	87.0	85.8	86.9	31.0	31.0	1.1	-0.6
73	88.3	85.7	74.8	88.0	86.4	87.6	29.0	27.5	1.5	-0.6
74	87.5	85.3	77.5	86.3	88.1	89.8	22.0	21.0	1.7	-0.6
75	89.6	86.9	75.6	87.2	85.9	87.1	35.0	39.0	1.2	-0.7
Avs.	88.2	85.6	75.4	87.1	86.6	87.9	29.2	29.6	1.4	-0.6
Std Dv	1.0	1.0	1.7	0.7	1.1	1.3	5.4	7.5	0.3	0.0
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS										
76	84.6	81.8	69.9	84.3	81.0	82.1	36.0	38.0	1.1	-0.6
77	87.8	85.0	73.7	86.1	84.3	85.9	37.0	45.0	1.6	-0.8
Avs.	86.2	83.4	71.8	85.2	82.7	84.0	36.5	41.5	1.3	-0.7
Std Dv	2.3	2.2	2.7	1.3	2.4	2.7	0.7	4.9	0.3	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.5-2.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
1/ 2/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
56	101.9	98.8	94.1	99.0	105.3	106.2	6.5	8.5	1.2	-0.7
57	101.8	98.3	92.6	100.0	103.9	105.5	8.0	8.0	1.7	-0.8
58	102.1	99.4	94.1	98.4	105.3	106.0	6.5	8.0	0.8	-0.5
59	101.3	97.7	91.4	99.5	103.2	104.7	9.5	9.0	1.5	-0.8
Avg.	101.8	98.6	93.0	99.2	104.4	105.6	7.6	8.4	1.3	-0.7
Std Dv	0.4	0.7	1.3	0.7	1.0	0.6	1.4	0.5	0.4	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
60	99.0	95.9	89.6	96.6	101.9	102.8	10.0	12.0	0.9	-0.1
61	100.9	98.3	90.2	97.6	100.6	101.7	14.5	17.5	1.2	-0.6
62	-	95.1	88.0	95.1	99.7	100.0	12.0	-	0.3	-
63	100.8	98.4	91.1	97.5	101.3	102.6	13.5	14.5	1.4	-0.6
Avg.	100.2	96.9	89.7	96.7	100.9	101.8	12.5	11.0	0.9	-0.4
Std Dv	1.1	1.7	1.3	1.1	0.9	1.3	2.0	7.7	0.5	0.3
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
64	96.7	94.5	86.6	94.1	97.6	98.1	14.0	16.5	0.5	-0.2
65	99.5	97.1	89.9	96.1	99.8	101.3	15.0	16.5	1.6	-0.7
66	96.4	93.8	85.3	92.6	97.0	97.3	14.5	16.5	0.3	-0.2
67	98.5	96.1	88.2	95.4	98.0	99.5	14.5	18.0	1.5	-0.7
Avg.	97.8	95.4	87.5	94.5	98.1	99.0	14.5	16.9	1.0	-0.4
Std Dv	1.5	1.5	2.0	1.5	1.2	1.8	0.4	0.7	0.6	0.3

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-3.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
1/ 2/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G   SIDELINE - 150 M. SOUTH (FLUSH)   JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
68	93.3	90.9	83.0	90.7	94.1	94.9	19.0	20.0	0.7	-0.3
69	96.0	93.4	85.1	92.6	94.5	96.1	21.5	24.0	1.6	-0.6
70	92.9	90.3	81.2	89.9	92.6	93.3	18.0	27.0	0.7	-0.2
71	96.3	93.8	86.6	92.8	96.3	97.8	18.0	22.0	1.5	-0.6
Avs.	94.6	92.1	84.0	91.5	94.4	95.5	19.1	23.2	1.1	-0.4
Std Dv	1.8	1.7	2.3	1.4	1.5	1.9	1.7	3.0	0.5	0.2
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
72	91.1	88.5	78.0	89.6	89.2	90.2	30.5	31.0	1.0	-0.4
73	92.1	89.4	78.9	90.9	89.5	91.1	28.5	28.0	1.6	-0.6
74	91.4	89.3	81.6	89.0	92.3	92.9	19.5	22.0	0.5	-0.3
75	93.2	90.4	80.0	89.8	90.2	91.6	32.0	36.5	1.3	-0.6
Avs.	91.9	89.4	79.6	89.8	90.3	91.5	27.6	29.4	1.1	-0.5
Std Dv	0.9	0.8	1.5	0.8	1.4	1.1	5.6	6.0	0.5	0.2
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
76	88.6	85.8	74.1	86.6	84.8	86.1	33.5	37.0	1.4	-0.4
77	91.6	88.7	78.2	89.0	87.9	89.5	32.0	43.0	1.6	-0.6
Avs.	90.1	87.2	76.1	87.8	86.4	87.8	32.7	40.0	1.5	-0.5
Std Dv	2.1	2.0	2.9	1.7	2.2	2.4	1.1	4.2	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-2.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
1/ 2/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
56	92.1	87.7	80.7	91.0	92.4	94.4	13.5	14.5	1.9	-0.7
57	94.8	91.0	83.5	93.4	94.5	96.2	12.5	14.5	2.4	-1.3
58	93.3	89.5	83.0	91.3	94.3	96.1	11.0	11.0	1.9	-0.5
59	97.2	93.7	85.9	93.5	97.4	98.5	13.5	18.5	1.1	-0.6
Avs.	94.3	90.5	83.3	92.3	94.6	96.3	12.6	14.6	1.8	-0.8
Std Dv	2.2	2.5	2.1	1.3	2.1	1.7	1.2	3.1	0.5	0.4
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
60	92.4	89.1	80.5	89.9	91.8	93.3	16.0	16.5	2.1	-0.9
61	94.9	92.1	83.2	91.4	94.7	95.9	16.5	22.0	1.1	-0.9
62	94.1	89.8	80.3	93.7	92.7	93.9	23.0	29.0	1.9	-0.7
63	95.5	92.7	83.2	93.5	94.5	96.0	20.5	21.0	1.5	-0.7
Avs.	94.2	91.0	81.8	92.1	93.4	94.8	19.0	22.1	1.7	-0.8
Std Dv	1.3	1.8	1.6	1.8	1.4	1.4	3.3	5.2	0.5	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
64	94.4	91.3	82.2	91.8	93.1	94.0	16.0	19.5	1.6	-0.7
65	93.5	90.3	81.6	91.1	93.4	94.2	19.0	25.5	0.9	-0.7
66	93.2	90.2	80.6	91.9	91.9	93.0	21.0	19.0	1.6	-0.7
67	91.7	88.8	78.7	89.5	90.4	91.2	24.5	25.5	0.8	-0.7
Avs.	93.2	90.1	80.8	91.1	92.2	93.1	20.1	22.4	1.2	-0.7
Std Dv	1.1	1.0	1.5	1.1	1.4	1.4	3.6	3.6	0.5	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.5-3.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
1/ 2/81

SITE: 6　　SIDELINE - 284 M. NORTH　　JUNE 25,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
68	91.3	88.6	79.0	89.4	89.2	90.7	28.0	32.5	1.5	-0.8
69	89.4	86.2	76.1	88.1	86.9	88.0	24.5	44.0	1.1	-0.6
70	92.0	89.0	78.8	89.7	89.8	92.1	25.5	29.0	2.3	-0.8
71	90.4	87.0	75.9	88.4	86.9	87.9	29.5	39.5	1.0	-0.6
Avs.	90.8	87.7	77.5	88.9	88.2	89.7	26.9	36.2	1.5	-0.7
Std Dv	1.1	1.3	1.7	0.8	1.5	2.1	2.3	6.8	0.6	0.1
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
72	90.6	87.9	77.9	88.0	88.0	89.4	30.0	31.5	1.5	-1.0
73	-	85.5	75.1	86.8	85.4	86.4	28.0	-	1.0	-
74	90.2	87.6	77.2	88.9	88.7	90.5	28.0	25.5	1.9	-0.9
75	88.4	85.6	73.8	86.9	84.8	86.4	43.0	49.0	1.6	-0.6
Avs.	89.7	86.6	76.0	87.7	86.7	88.2	32.2	26.5	1.5	-0.8
Std Dv	1.2	1.3	1.9	1.0	1.9	2.1	7.2	20.3	0.4	0.2
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS										
76	88.5	86.2	76.5	86.0	86.1	87.3	36.0	39.0	1.2	-1.0
77	-	82.7	70.8	86.7	82.7	83.9	40.5	-	1.2	-
Avs.	88.5	84.5	73.6	86.4	84.4	85.6	38.2	19.5	1.2	-1.0
Std Dv	-	2.5	4.1	0.5	2.4	2.4	3.2	27.6	0.0	-

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-1.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
1/13/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS										
22	98.4	94.1	87.7	98.1	101.0	101.8	10.5	10.5	0.8	-0.5
24	97.5	92.8	86.3	97.1	100.4	101.2	10.5	10.5	0.8	-0.6
26	97.9	93.5	86.5	96.6	100.1	100.7	11.0	11.0	0.6	-0.5
28	97.5	93.2	87.0	97.8	100.7	101.3	10.5	10.0	0.7	-0.4
Avg.	97.8	93.4	86.9	97.4	100.5	101.3	10.6	10.5	0.7	-0.5
Std Dv	0.4	0.5	0.6	0.6	0.4	0.4	0.2	0.4	0.1	0.1
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS										
30	97.3	93.1	86.6	96.5	99.6	100.5	12.5	12.0	0.9	-0.5
32	99.1	94.4	86.0	96.4	100.0	100.9	15.0	14.5	0.9	-0.7
34	96.1	92.2	84.1	92.1	97.0	97.8	16.5	16.5	0.8	-0.6
36		----------		NO DATA		----------				
Avg.	97.5	93.3	85.5	95.0	98.9	99.7	14.7	14.3	0.9	-0.6
Std Dv	1.5	1.1	1.3	2.5	1.6	1.7	2.0	2.3	0.1	0.1
APPROACH BEST RATE OF CLIMB										
38	97.7	93.5	86.1	95.3	98.6	99.8	14.5	14.5	1.2	-0.4
40	97.1	92.6	85.9	96.8	99.8	100.4	11.0	10.5	0.6	-0.3
42	97.6	93.5	36.6	97.6	100.7	101.3	14.5	11.0	0.6	-0.2
Avg.	97.5	93.2	86.2	96.6	99.7	100.5	13.3	12.0	0.8	-0.3
Std Dv	0.3	0.5	0.4	1.2	1.0	0.8	2.0	2.2	0.3	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-2.1 (REV 1)

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
6/10/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(F)	TC	/**
TAKEOFF - HOVER POWER PLUS 10%										
21	90.6	85.3	76.8	84.1	90.4	92.3	15.0	16.0	1.9	-0.6
23	90.7	85.4	77.6	84.8	90.9	92.3	13.5	15.5	1.8	-0.6
25	90.6	85.3	77.6	85.3	90.7	91.9	13.0	17.0	1.4	-0.8
27	90.5	85.5	77.8	85.9	90.9	92.2	12.5	15.5	1.2	-0.8
29	90.0	84.7	77.2	85.1	90.5	91.8	12.5	16.5	1.3	-0.8
31	91.8	86.7	78.0	86.2	91.6	92.9	16.5	17.0	1.3	-0.8
33	91.4	86.4	77.9	85.3	91.5	92.5	16.0	16.5	1.1	-0.7
Avg.	90.8	85.6	77.5	85.2	90.9	92.3	14.1	16.3	1.4	-0.7
Std Dv	0.6	0.7	0.4	0.7	0.5	0.4	1.7	0.6	0.3	0.1
TAKEOFF - MAXIMUM POWER										
35	90.9	86.1	78.2	84.2	90.4	92.1	15.0	17.5	1.6	-0.9
37	91.2	86.6	78.1	84.7	90.8	92.1	16.5	18.0	1.4	-0.8
39	91.3	86.2	77.6	84.4	90.7	92.0	16.5	17.5	1.3	-0.9
41	90.3	85.6	76.1	85.8	89.0	90.6	17.5	18.5	1.6	-0.7
Avg.	90.9	86.1	77.5	84.8	90.2	91.7	16.4	17.9	1.5	-0.8
Std Dv	0.4	0.4	1.0	0.7	0.8	0.7	1.0	0.5	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS TORQUE >90%										
43		----------		NO DATA		----------				
44	95.1	90.9	84.3	97.1	97.2	98.0	10.0	10.5	1.5	-0.6
45	95.3	91.1	83.9	97.2	96.4	97.2	11.0	12.5	1.5	-0.7
46	94.6	90.4	83.9	96.9	96.9	98.2	10.0	10.5	1.3	-0.7
47	96.4	92.5	84.9	97.9	97.5	98.7	11.0	11.5	1.3	-0.8
Avg.	95.3	91.2	84.2	97.3	97.0	98.0	10.5	11.2	1.4	-0.7
Std Dv	0.8	0.9	0.5	0.5	0.5	0.6	0.6	1.0	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-1.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G   CENTERLINE - CENTER (FLUSH)   JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS										
22	102.0	98.2	91.9	102.2	104.8	105.3	10.5	10.5	0.5	-0.3
24	101.2	97.2	91.2	101.9	104.5	105.0	10.0	10.5	0.5	-0.4
26	102.3	98.1	91.5	101.7	104.9	105.3	10.5	11.0	0.5	-0.4
28	101.8	97.7	91.3	102.2	104.5	104.7	10.5	11.5	0.4	-0.3
Avs.	101.8	97.8	91.5	102.0	104.7	105.1	10.4	10.9	0.5	-0.3
Std Dv	0.5	0.5	0.3	0.2	0.2	0.3	0.2	0.5	0.0	0.1
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS										
30	100.9	97.3	91.0	100.4	103.3	103.6	12.5	13.5	0.3	-0.1
32	101.2	97.2	88.7	99.1	102.7	103.5	15.0	14.0	0.8	-0.3
34	99.2	95.5	87.6	95.7	100.1	100.4	16.0	18.0	0.3	-0.2
36	99.6	95.8	88.4	97.3	101.2	101.7	14.0	14.5	0.5	-0.3
Avs.	100.3	96.4	88.9	98.1	101.8	102.3	14.4	15.0	0.5	-0.2
Std Dv	1.0	1.0	1.4	2.0	1.5	1.5	1.5	2.0	0.2	0.1
APPROACH - BEST RATE OF CLIMB										
38	100.7	96.9	88.8	98.0	101.6	102.6	14.5	15.0	1.0	-0.1
40	100.0	96.0	89.1	99.8	102.4	102.9	11.5	11.0	0.5	-0.1
42	101.0	97.0	90.0	100.7	103.2	103.7	14.5	15.5	0.5	-0.2
Avs.	100.6	96.7	89.3	99.5	102.4	103.1	13.5	13.8	0.7	-0.2
Std Dv	0.5	0.5	0.6	1.4	0.8	0.5	1.7	2.5	0.3	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-2.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G   CENTERLINE - CENTER (FLUSH)   JUNE 26,1980

TAKEOFF - HOVER POWER PLUS 10%

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
21	92.1	87.0	78.5	89.7	91.1	93.1	14.5	16.5	2.0	-0.7
23	95.1	89.9	81.9	90.3	95.1	96.4	13.5	15.0	1.3	-0.6
25	95.2	89.6	81.9	91.6	94.9	97.0	13.5	16.0	2.1	-0.8
27	95.9	90.5	82.8	92.6	95.9	98.0	13.0	14.0	2.2	-0.9
29	95.0	89.4	81.8	92.0	95.1	97.3	13.0	14.0	2.2	-0.9
31	95.2	89.8	81.0	92.1	94.5	96.7	16.0	16.5	2.2	-0.9
33	95.0	89.6	81.2	91.1	94.4	96.4	15.5	16.5	2.2	-0.9
Avs.	94.8	89.4	81.3	91.3	94.4	96.4	14.1	15.5	2.0	-0.8
Std Dv	1.2	1.1	1.4	1.1	1.6	1.6	1.2	1.2	0.3	0.1

TAKEOFF - MAXIMUM POWER

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
35	94.0	89.1	81.3	89.3	92.9	94.5	15.0	17.5	2.4	-1.1
37	94.4	89.7	81.6	89.8	94.0	95.9	15.0	16.0	1.9	-1.0
39	94.2	89.1	80.1	89.0	93.3	95.4	16.5	17.0	2.2	-1.0
41	93.8	88.8	79.4	89.0	92.1	94.4	16.5	17.0	2.3	-1.1
Avs.	94.1	89.2	80.6	89.3	93.1	95.1	15.7	16.9	2.2	-1.0
Std Dv	0.3	0.4	1.0	0.4	0.8	0.7	0.9	0.6	0.2	0.0

500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS TORQUE > 90%

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
43	98.5	94.6	87.9	100.3	100.1	101.3	10.0	10.5	1.4	-0.6
44	98.6	94.3	88.0	100.3	100.5	101.3	10.0	10.5	1.3	-0.6
45	98.7	94.7	88.1	100.2	100.3	101.7	10.5	10.5	1.3	-0.4
46	98.1	93.9	87.6	100.2	100.8	102.1	9.0	9.5	1.4	-0.6
47	99.9	96.1	89.0	101.1	101.3	102.5	10.5	10.5	1.1	-0.5
Avs.	98.8	94.7	88.1	100.4	100.6	101.8	10.0	10.3	1.3	-0.5
Std Dv	0.7	0.8	0.5	0.4	0.5	0.5	0.6	0.4	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-1.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
1/21/81

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H CENTERLINE - CENTER (10 METER) JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS										
22	98.6	94.1	87.9	98.3	102.0	102.5	10.5	10.0	0.5	-0.3
24	97.8	93.2	87.3	98.0	101.8	102.2	10.5	9.0	0.4	-0.3
26	99.1	94.1	86.8	98.1	102.2	102.8	11.0	9.0	0.6	-0.3
28	98.4	93.7	87.4	98.3	101.8	102.0	9.5	9.5	0.3	-0.2
Avs.	98.5	93.8	87.4	98.2	101.9	102.4	10.4	9.4	0.5	-0.3
Std Dv	0.5	0.4	0.5	0.2	0.2	0.3	0.6	0.5	0.2	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS										
30	98.3	93.9	87.4	97.6	101.3	101.6	12.5	11.0	0.3	-0.3
32	98.1	93.4	86.1	97.2	100.7	101.2	13.5	12.5	0.5	-0.3
34	95.6	91.4	83.8	91.7	97.0	97.5	13.0	15.0	0.6	-0.2
36	96.4	91.9	84.4	93.2	97.8	98.3	14.0	14.5	0.5	-0.3
Avs.	97.1	92.6	85.4	94.9	99.2	99.6	13.2	13.2	0.5	-0.3
Std Dv	1.3	1.2	1.7	2.9	2.1	2.0	0.6	1.8	0.1	0.1
APPROACH - BEST RATE OF CLIMB										
38	97.3	92.9	84.7	94.5	98.4	98.8	15.0	15.5	0.5	-0.2
40	96.9	92.3	86.5	98.0	100.5	100.8	10.0	10.0	0.3	-0.1
42	97.3	92.8	87.5	98.5	101.4	101.7	10.0	10.0	0.2	-0.2
Avs.	97.1	92.6	85.6	96.3	99.4	99.8	12.5	12.7	0.4	-0.2
Std Dv	0.3	0.4	1.2	2.5	1.5	1.4	3.5	3.9	0.2	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-2.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H CENTERLINE - CENTER (10 METER) JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
TAKEOFF - HOVER POWER PLUS 10%										
21	93.1	87.4	78.7	84.8	92.7	94.4	14.5	15.0	1.9	-0.7
23	94.2	88.7	80.2	85.5	94.4	95.5	22.0	21.5	2.2	-0.6
25	93.9	88.1	81.1	87.1	95.3	97.5	11.5	11.0	2.2	-0.8
27	94.3	88.6	81.6	87.2	95.6	97.8	11.5	11.5	2.1	-0.7
29	93.2	87.5	80.9	86.8	95.1	97.3	10.5	10.0	2.2	-0.8
31	92.1	86.4	78.9	86.9	93.2	95.4	13.0	12.0	2.3	-1.0
33	91.9	86.2	78.6	86.2	92.8	94.6	14.5	14.0	1.9	-0.9
Avs.	93.2	87.6	80.0	86.4	94.1	96.1	13.9	13.6	2.1	-0.8
Std Dv	1.0	1.0	1.2	0.9	1.3	1.4	3.9	3.9	0.2	0.1
TAKEOFF - MAXIMUM POWER										
35	91.5	86.0	77.9	84.7	91.4	93.4	14.5	14.5	2.3	-1.0
37	91.8	86.6	78.2	85.8	91.7	93.4	20.5	15.0	1.7	-0.9
39	91.6	85.7	77.3	85.3	91.3	93.7	15.0	14.0	2.4	-1.0
41	91.0	85.6	76.4	84.8	89.9	92.0	26.0	25.0	2.4	-1.0
Avs.	91.4	86.0	77.5	85.2	91.1	93.1	19.0	17.1	2.2	-1.0
Std Dv	0.3	0.4	0.8	0.5	0.8	0.8	5.4	5.3	0.3	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS TORQUE > 90%										
43		----------		NO DATA		----------				
44	94.4	89.8	83.5	94.1	97.0	98.0	9.5	10.0	1.0	-0.7
45	94.2	89.6	83.5	93.8	96.5	97.7	9.0	11.0	1.2	-0.8
46	94.1	89.4	83.5	93.5	97.1	98.1	8.5	9.5	1.3	-0.7
47	95.6	91.5	84.6	95.0	97.6	98.7	10.5	10.5	1.1	-0.7
Avs.	94.6	90.1	83.8	94.1	97.1	98.1	9.4	10.2	1.1	-0.7
Std Dv	0.7	1.0	0.6	0.6	0.4	0.4	0.9	0.6	0.1	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-1.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/25/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS										
22	98.9	94.0	86.7	97.0	101.0	101.6	11.5	11.0	0.6	-0.6
24	98.9	94.3	87.2	97.8	101.3	102.2	10.5	10.5	0.9	-0.6
26	100.1	95.3	89.8	100.5	103.7	104.3	8.5	8.5	0.5	-0.6
28	99.9	95.0	88.6	100.4	103.5	104.2	9.5	8.0	0.8	-0.6
Avg.	99.4	94.6	88.1	98.9	102.4	103.1	10.0	9.5	0.7	-0.6
Std Dv	0.6	0.6	1.4	1.8	1.4	1.4	1.3	1.5	0.2	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS										
30	100.1	95.6	89.7	99.8	103.3	104.1	9.0	9.5	0.8	-0.5
32	98.1	93.9	88.1	96.7	100.9	101.9	10.0	10.5	1.0	-0.5
34	97.9	93.6	86.6	96.0	99.8	100.9	13.5	13.0	1.1	-0.6
36	99.5	94.8	87.8	98.0	101.4	102.3	11.0	11.0	0.9	-0.6
Avg.	98.9	94.5	88.1	97.6	101.4	102.3	10.9	11.0	1.0	-0.5
Std Dv	1.1	0.9	1.3	1.7	1.5	1.4	1.9	1.5	0.1	0.1
APPROACH - BEST RATE OF CLIMB										
38	98.9	94.3	86.9	98.4	101.6	102.4	11.5	11.0	0.8	-0.4
40	98.3	94.0	87.6	98.4	101.4	102.4	11.5	10.5	1.0	-0.4
42	99.0	94.3	87.3	98.4	101.8	102.6	12.0	10.5	0.8	-0.5
Avg.	98.7	94.2	87.3	98.4	101.6	102.5	11.7	10.7	0.8	-0.4
Std Dv	0.4	0.2	0.3	0.0	0.2	0.1	0.3	0.3	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

DOT/TSC
1/21/81

TABLE NO. A.7-2.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
TAKEOFF - HOVER POWER PLUS 10%										
21	94.4	88.6	80.9	87.5	94.7	96.4	15.0	15.5	1.9	-0.7
23	94.5	88.8	82.1	88.7	96.0	97.5	10.0	11.5	1.5	-0.5
25	94.4	89.0	82.5	88.9	96.0	97.3	10.0	11.5	1.3	-0.9
27	94.9	89.3	83.2	89.0	96.7	97.8	9.5	13.5	1.1	-0.8
29	93.8	88.3	81.5	88.2	95.3	96.5	11.0	13.5	1.2	-0.6
31	93.5	88.2	80.8	87.3	94.5	95.6	15.5	15.5	1.1	-0.7
33	93.9	88.6	81.1	87.2	95.1	96.1	15.0	15.0	1.0	-0.7
Avs.	94.2	88.7	81.7	88.1	95.5	96.7	12.3	13.7	1.3	-0.7
Std Dv	0.5	0.4	0.9	0.8	0.8	0.8	2.7	1.7	0.3	0.1
TAKEOFF - MAXIMUM POWER										
35	93.3	88.1	81.0	86.9	94.5	95.9	13.5	14.0	1.5	-0.7
37	93.6	88.1	81.6	87.1	95.2	96.4	10.0	13.0	1.2	-0.9
39	93.8	88.4	81.2	87.0	95.1	96.6	12.5	12.0	1.5	-0.7
41	92.7	87.5	79.8	86.2	93.3	94.5	13.5	15.0	1.3	-0.6
Avs.	93.4	88.0	80.9	86.8	94.5	95.8	12.4	13.5	1.4	-0.7
Std Dv	0.5	0.4	0.8	0.4	0.9	0.9	1.7	1.3	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%										
43	-	90.2	83.4	95.7	95.6	96.9	16.0	-	1.3	-
44	95.1	90.8	84.5	96.4	97.6	98.3	9.5	11.0	1.0	-0.7
45	94.4	90.4	82.9	95.9	95.2	96.3	14.0	14.0	1.1	-0.7
46	94.1	89.8	83.2	96.2	96.9	98.3	9.0	8.5	1.4	-0.5
47	95.9	92.0	84.8	97.6	97.7	98.7	10.5	11.0	1.1	-0.6
Avs.	94.9	90.6	83.8	96.3	96.6	97.7	11.8	8.9	1.2	-0.6
Std Dv	0.8	0.8	0.8	0.7	1.1	1.0	3.1	5.3	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-1.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/25/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS										
22	98.2	93.8	86.9	97.6	100.5	101.4	13.0	12.0	0.9	-0.6
24	98.5	93.8	86.6	98.0	100.4	101.4	12.5	12.0	1.1	-0.5
26	98.3	93.7	86.6	96.9	100.3	101.4	12.0	12.0	1.1	-0.6
28	97.6	93.6	85.5	96.6	99.3	99.9	12.0	11.5	1.1	-0.5
Avs.	98.2	93.7	86.4	97.3	100.1	101.0	12.4	11.9	1.0	-0.5
Std Dv	0.4	0.1	0.6	0.6	0.6	0.7	0.5	0.2	0.1	0.1
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS										
30	97.0	92.9	85.0	94.4	97.8	99.0	15.0	14.5	1.2	-0.6
32	96.3	92.0	82.7	93.7	96.5	97.6	18.5	18.0	1.1	-0.6
34	95.9	92.2	85.1	93.5	97.9	98.3	12.5	13.0	0.5	-0.6
36	97.0	92.7	84.4	93.7	97.3	98.2	15.0	15.0	1.0	-0.7
Avs.	96.6	92.5	84.3	93.8	97.4	98.3	15.2	15.1	0.9	-0.6
Std Dv	0.6	0.4	1.1	0.4	0.6	0.6	2.5	2.1	0.3	0.1
APPROACH - BEST RATE OF CLIMB										
38	97.9	93.1	83.4	95.1	98.0	98.9	17.0	16.5	0.9	-0.6
40	95.3	91.3	81.5	90.3	94.9	95.8	24.0	21.5	0.9	-0.7
42	97.6	93.1	84.4	96.4	99.2	100.1	16.5	14.5	0.9	-0.5
Avs.	96.9	92.5	83.1	93.9	97.4	98.3	19.2	17.5	0.9	-0.6
Std Dv	1.5	1.0	1.5	3.2	2.2	2.2	4.2	3.6	0.0	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-2.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/25/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 26,1980

TAKEOFF - HOVER POWER PLUS 10%

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
21	90.3	85.0	75.7	84.5	89.5	91.1	18.5	19.0	1.6	-0.7
23	90.8	85.7	76.8	85.5	90.1	91.6	16.0	17.5	2.0	-0.6
25	90.9	85.8	77.1	85.2	90.4	91.9	22.0	22.5	1.4	-0.7
27	90.5	85.4	76.2	85.6	89.9	91.0	18.5	18.0	1.6	-0.8
29	90.3	85.0	76.3	85.2	89.6	91.2	16.0	21.0	1.6	-0.7
31	90.4	85.4	76.0	85.3	89.0	90.3	22.0	22.5	1.3	-0.7
33	90.5	85.5	76.4	84.1	90.0	91.2	17.5	18.0	1.2	-0.7
Avg.	90.5	85.4	76.4	85.1	89.8	91.2	18.6	19.8	1.5	-0.7
Std Dv	0.2	0.3	0.5	0.5	0.5	0.5	2.5	2.2	0.3	0.1

TAKEOFF - MAXIMUM POWER

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
35	89.2	84.8	75.1	82.6	87.9	89.3	18.0	20.5	1.4	-0.7
37	89.7	85.3	75.5	83.4	88.7	89.8	19.5	20.5	1.1	-0.6
39	89.9	85.0	75.2	83.3	88.2	89.4	21.5	25.5	1.3	-0.7
41	88.7	84.3	74.4	83.0	87.4	88.5	20.0	22.5	1.1	-0.7
Avg.	89.4	84.8	75.1	83.1	88.1	89.3	19.7	22.2	1.2	-0.7
Std Dv	0.6	0.4	0.4	0.4	0.6	0.5	1.4	2.4	0.1	0.1

500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
43	95.0	90.9	83.0	96.8	95.4	96.9	12.0	12.5	1.7	-0.8
44	95.4	91.3	84.4	97.9	97.2	98.0	10.0	10.5	1.4	-0.8
45	95.8	91.7	83.5	97.0	96.2	97.8	15.5	15.5	1.6	-0.8
46	94.5	90.2	84.3	96.1	97.0	97.8	9.0	10.5	0.8	-0.7
47	96.4	92.6	84.6	97.5	97.0	98.4	11.5	13.0	1.4	-0.8
Avg.	95.4	91.4	84.0	97.1	96.6	97.8	11.6	12.4	1.4	-0.8
Std Dv	0.7	0.9	0.7	0.7	0.8	0.5	2.5	2.1	0.4	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.7-1.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/24/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE - 164M. NORTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH - BEST RATE OF CLIMB + 10 KTS										
22	97.9	93.5	85.6	94.3	98.1	99.4	13.0	15.5	1.3	-1.1
24	98.2	94.2	87.2	94.6	99.3	100.5	15.5	16.0	1.2	-1.0
26	99.5	95.6	88.4	95.8	100.6	102.3	12.0	11.5	1.8	-1.0
28	98.8	94.7	87.5	95.1	99.7	101.1	14.5	15.0	1.7	-1.0
Avs.	98.6	94.5	87.2	94.9	99.4	100.8	13.7	14.5	1.5	-1.0
Std Dv	0.7	0.9	1.2	0.7	1.1	1.2	1.6	2.0	0.3	0.1
APPROACH - BEST RATE OF CLIMB - 10 KTS										
30	94.6	90.7	81.1	91.2	94.5	96.2	22.5	21.0	1.6	-1.1
32	94.8	90.8	85.3	94.0	97.7	98.7	11.0	11.5	0.9	-0.9
34	93.9	90.0	78.5	88.2	90.7	92.9	22.5	22.5	2.9	-1.2
36	94.3	90.7	79.9	88.6	92.6	93.9	22.5	22.5	1.6	-0.9
Avs.	94.4	90.5	81.2	90.5	93.9	95.4	19.6	19.4	1.7	-1.0
Std Dv	0.4	0.3	2.9	2.7	3.0	2.6	5.7	5.3	0.8	0.1
APPROACH - BEST RATE OF CLIMB										
38	96.7	92.7	83.9	91.8	96.4	97.3	20.0	20.0	0.9	-0.9
40	94.2	90.5	82.6	92.3	96.2	97.7	22.5	14.5	1.9	-0.7
42	97.3	93.1	85.9	94.6	99.0	100.3	15.5	15.0	1.3	-1.2
Avs.	96.1	92.1	84.1	92.9	97.2	98.4	19.3	16.5	1.4	-0.9
Std Dv	1.6	1.4	1.7	1.5	1.6	1.6	3.5	3.0	0.5	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-2.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/25/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE - 164M. NORTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
TAKEOFF - HOVER POWER PLUS 10%										
21	92.1	86.8	77.9	85.8	91.1	92.7	17.5	18.5	1.5	-1.2
23	92.4	86.9	78.0	86.4	91.3	93.1	16.5	19.5	1.7	-1.3
25	92.9	87.9	79.2	87.5	91.7	93.2	16.0	17.5	1.9	-1.2
27	93.3	88.4	80.4	87.7	93.5	95.3	14.0	15.0	1.8	-1.2
29	92.6	87.6	78.9	86.7	92.1	93.8	16.0	20.0	1.7	-1.2
31	92.2	87.4	78.6	86.4	91.1	92.1	17.5	20.0	1.4	-1.1
33	92.1	87.4	78.3	86.8	91.0	93.0	19.0	19.5	2.0	-1.2
Avs.	92.5	87.5	78.7	86.7	91.7	93.3	16.6	18.6	1.7	-1.2
Std Dv	0.4	0.5	0.9	0.7	0.9	1.0	1.6	1.8	0.2	0.0
TAKEOFF - MAXIMUM POWER										
35	91.8	86.9	78.1	86.9	90.6	92.9	18.0	18.5	2.3	-1.3
37	92.1	87.3	78.1	86.9	90.2	92.5	19.5	20.0	2.2	-1.3
39	-	86.9	77.7	87.2	90.2	92.2	19.5	-	2.0	-
41	91.8	86.8	76.9	86.4	89.3	91.7	22.0	21.5	2.6	-1.3
Avs.	91.9	87.0	77.7	86.8	90.1	92.3	19.7	15.0	2.3	-1.3
Std Dv	0.1	0.2	0.6	0.3	0.6	0.5	1.7	10.1	0.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%										
43	96.4	92.9	86.3	94.9	98.0	99.2	14.0	15.0	1.2	-0.8
44	96.7	93.2	85.9	97.3	97.7	99.0	12.0	12.0	1.2	-0.6
45	96.5	92.7	86.2	95.0	97.9	99.1	9.5	14.5	1.2	-0.9
46	95.6	92.0	85.5	94.5	97.2	98.1	9.5	13.0	1.3	-0.7
47	96.9	93.4	86.1	94.8	97.7	98.7	14.5	15.5	1.1	-0.8
Avs.	96.4	92.8	86.0	95.3	97.7	98.8	11.9	14.0	1.2	-0.8
Std Dv	0.5	0.5	0.3	1.1	0.3	0.4	2.4	1.5	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-1.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/24/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH - BEST RATE OF CLIMB - PLUS 10 KTS										
22	92.7	88.7	80.0	89.1	92.9	93.7	15.5	15.5	1.0	-0.5
24	92.5	88.6	80.2	89.5	92.8	93.7	15.0	15.0	1.1	-0.6
26	92.4	88.5	80.3	89.5	92.9	93.9	15.0	15.0	1.0	-0.6
28	91.7	87.9	79.4	88.7	92.0	93.0	16.0	16.0	0.8	-0.8
Avs.	92.3	88.4	80.0	89.2	92.7	93.6	15.4	15.4	1.0	-0.6
Std Dv	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.1	0.1
APPROACH - BEST RATE OF CLIMB - MINUS 10 KTS										
30	93.6	89.8	80.0	88.2	93.0	93.7	24.0	22.5	0.9	-0.7
32	94.2	90.2	78.9	88.0	92.4	93.4	23.0	22.5	1.0	-0.5
34	92.9	89.4	80.9	88.2	93.2	93.9	20.5	20.0	0.7	-0.8
36	93.6	89.8	79.9	87.4	92.2	93.7	20.0	19.5	1.4	-0.7
Avs.	93.6	89.8	79.9	87.9	92.7	93.7	21.9	21.1	1.0	-0.7
Std Dv	0.5	0.3	0.8	0.4	0.4	0.2	1.9	1.6	0.3	0.1
APPROACH - BEST RATE OF CLIMB										
38	91.3	87.4	77.8	85.8	90.4	91.5	21.5	21.0	1.1	-0.7
40	93.0	89.6	80.1	87.0	92.7	93.8	20.0	19.5	1.0	-0.6
42	92.1	88.4	78.7	87.2	91.5	92.5	20.0	19.5	1.0	-0.5
Avs.	92.1	88.4	78.9	86.7	91.5	92.6	20.5	20.0	1.0	-0.6
Std Dv	0.8	1.1	1.2	0.8	1.2	1.1	0.9	0.9	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

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BEST DOCUMENT AVAILABLE

TABLE NO. A.7-2.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/25/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
TAKEOFF - HOVER POWER PLUS 10%										
21	90.2	85.8	76.0	85.0	88.9	90.2	20.5	21.5	1.4	-0.9
23	90.1	86.0	76.2	85.9	89.0	90.4	19.0	19.5	1.7	-0.9
25	90.4	86.3	76.8	85.8	89.5	90.7	20.0	20.5	1.2	-0.8
27	90.4	86.3	77.0	85.7	89.5	91.1	18.5	19.0	1.6	-0.9
29	90.5	86.2	76.6	85.2	89.1	90.5	18.5	19.5	1.6	-0.8
31	89.8	85.7	76.1	85.1	88.8	89.9	21.0	21.5	1.4	-0.7
33	90.5	86.5	77.3	85.0	89.8	91.0	18.0	18.5	1.2	-0.6
Avs.	90.3	86.1	76.6	85.4	89.2	90.6	19.4	20.0	1.4	-0.8
Std Dv	0.3	0.3	0.5	0.4	0.4	0.4	1.1	1.2	0.2	0.1
TAKEOFF - MAXIMUM POWER										
35	89.4	85.2	75.4	83.5	88.4	89.5	18.5	18.5	1.2	-0.8
37	89.2	85.1	75.1	84.4	87.8	89.1	19.0	19.5	1.3	-0.8
39	89.2	85.0	74.4	82.7	87.3	88.4	22.0	23.0	1.1	-0.8
41	-	84.4	73.7	84.9	87.0	88.4	24.0	-	1.5	-
Avs.	89.3	84.9	74.7	83.9	87.6	88.9	20.9	15.2	1.3	-0.8
Std Dv	0.1	0.4	0.8	1.0	0.6	0.6	2.6	10.3	0.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%										
43	94.6	91.4	84.3	94.2	95.8	96.7	11.5	15.5	0.9	-0.6
44	96.1	92.3	85.2	95.2	97.2	98.6	13.0	13.5	1.4	-0.7
45	95.2	91.8	84.3	95.2	95.9	96.5	11.0	16.0	0.5	-0.4
46	95.4	91.9	85.3	95.7	97.0	98.1	15.5	14.5	1.1	-0.9
47	95.7	92.3	85.1	94.9	96.5	97.1	12.0	17.5	0.5	-0.6
Avs.	95.4	91.9	84.9	95.0	96.5	97.4	12.6	15.4	0.9	-0.6
Std Dv	0.5	0.4	0.5	0.6	0.6	0.9	1.8	1.5	0.4	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-1.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/26/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS										
22	96.6	92.6	84.0	92.2	97.0	97.9	15.0	15.0	0.9	-0.2
24	96.6	92.7	84.5	92.9	97.3	98.4	15.0	15.0	1.1	-0.1
26	96.9	92.7	84.7	92.5	97.8	98.8	14.0	14.5	1.0	-0.3
28	95.9	92.0	84.3	91.9	97.2	98.1	15.0	14.5	1.0	-0.4
Avg.	96.5	92.5	84.3	92.4	97.3	98.3	14.7	14.7	1.0	-0.2
Std Dv	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.3	0.1	0.1
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS										
30	95.3	91.3	82.9	88.4	95.7	97.0	16.5	16.5	1.4	-0.6
32	98.1	93.9	83.6	91.6	97.5	98.6	19.5	18.5	1.3	-0.1
34	97.3	93.3	84.9	91.6	97.8	98.5	16.0	16.0	0.7	-0.2
36	97.6	93.7	84.3	91.3	97.2	98.2	18.0	18.0	1.1	-0.1
Avg.	97.1	93.0	83.9	90.7	97.0	98.1	17.5	17.2	1.1	-0.3
Std Dv	1.2	1.2	0.9	1.5	1.0	0.7	1.6	1.2	0.3	0.3
APPROACH - BEST RATE OF CLIMB										
38	96.2	91.8	82.9	89.6	96.7	97.5	19.5	19.0	0.8	-0.3
40	97.0	93.4	85.2	92.1	98.4	99.5	15.0	14.5	1.1	-0.2
42	97.1	92.8	83.4	92.0	97.0	98.1	19.0	19.0	1.2	-0.2
Avg.	96.8	92.7	83.8	91.2	97.3	98.4	17.8	17.5	1.0	-0.2
Std Dv	0.5	0.8	1.2	1.4	0.9	1.0	2.5	2.6	0.2	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-2.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/26/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
TAKEOFF - HOVER POWER PLUS 10%										
21	94.3	90.0	81.0	86.4	94.1	95.4	15.0	15.5	1.3	-0.8
23	94.5	90.1	81.1	87.2	94.0	95.3	16.0	16.5	1.3	-0.7
25	95.0	90.6	81.9	87.6	94.7	95.9	15.5	17.0	1.1	-0.5
27	95.2	90.8	82.3	87.6	95.0	96.6	14.5	15.5	1.5	-0.6
29	94.7	90.4	81.4	87.1	94.3	95.4	14.0	15.0	1.4	-0.7
31	94.5	90.0	80.9	86.8	93.9	95.4	17.5	18.0	1.4	-0.7
33	95.4	90.9	82.9	86.7	95.9	96.9	14.5	16.0	1.0	-0.7
Avg.	94.8	90.4	81.6	87.1	94.6	95.8	15.3	16.2	1.3	-0.7
Std Dv	0.4	0.4	0.7	0.5	0.7	0.6	1.2	1.0	0.2	0.1
TAKEOFF - MAXIMUM POWER										
35	94.5	89.9	81.1	86.3	94.2	95.6	17.0	17.5	1.4	-0.7
37	94.2	89.6	80.4	86.6	94.3	95.1	15.0	16.0	0.8	-0.7
39	93.9	89.3	79.7	85.2	93.1	94.1	17.5	18.5	1.0	-0.7
41	93.3	88.8	79.0	85.2	92.5	94.0	17.0	17.0	1.5	-0.7
Avg.	94.0	89.4	80.1	85.8	93.5	94.7	16.6	17.2	1.2	-0.7
Std Dv	0.5	0.5	0.9	0.7	0.9	0.8	1.1	1.0	0.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%										
43	99.1	96.2	89.4	95.6	100.7	101.8	10.5	12.0	1.0	-0.4
44	99.9	96.5	89.9	98.3	101.4	102.5	11.5	12.0	1.4	-0.6
45	99.4	96.5	90.0	96.5	101.6	102.2	10.0	11.0	0.6	-0.4
46	99.6	96.0	89.9	98.6	101.7	103.0	9.0	10.5	1.3	-0.7
47	99.8	97.0	90.8	96.3	102.4	103.0	9.5	10.5	0.5	-0.4
Avg.	99.6	96.5	90.0	97.1	101.6	102.5	10.1	11.2	1.0	-0.5
Std Dv	0.4	0.4	0.5	1.3	0.6	0.5	1.0	0.8	0.4	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

DOT/TSC
1/22/81

TABLE NO. A.7-1.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS										
22	91.6	88.6	78.2	88.9	89.6	91.5	22.5	22.0	2.1	-0.7
24	92.6	89.6	80.3	88.3	91.5	93.7	19.5	19.0	2.3	-0.9
26	92.5	89.4	81.1	89.3	92.8	94.1	19.0	17.0	1.2	-0.8
28	91.5	88.5	79.5	89.7	91.6	92.5	21.5	20.0	1.0	-0.7
Avg.	92.1	89.0	79.8	89.0	91.4	93.0	20.6	19.5	1.7	-0.8
Std Dv	0.6	0.5	1.2	0.6	1.3	1.2	1.7	2.1	0.7	0.1
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS										
30	88.9	85.7	74.7	87.3	86.5	88.1	33.5	33.0	1.9	-0.7
32	88.9	85.6	77.7	87.2	89.7	91.2	21.5	21.0	1.5	-1.0
34	89.4	86.4	74.5	86.1	85.6	87.2	32.5	33.0	2.1	-0.8
36	89.3	86.3	74.3	86.6	86.0	87.3	38.5	38.0	1.4	-0.7
Avg.	89.1	86.0	75.3	86.8	86.9	88.5	31.5	31.2	1.7	-0.8
Std Dv	0.3	0.4	1.6	0.5	1.8	1.9	7.2	7.2	0.4	0.2
APPROACH - BEST RATE OF CLIMB										
38	90.4	87.3	79.2	86.6	90.9	92.7	22.5	19.0	1.7	-0.6
40	89.4	86.7	75.5	87.6	87.9	88.6	35.5	37.0	0.6	-0.6
42	97.1	93.3	83.2	89.1	94.3	97.1	22.0	22.0	2.9	-1.4
Avg.	92.3	89.1	79.3	87.8	91.0	92.8	26.7	26.0	1.7	-0.9
Std Dv	4.1	3.7	3.9	1.2	3.2	4.2	7.7	9.6	1.2	0.5

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.7-2.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
11/26/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
TAKEOFF - HOVER POWER PLUS 10%										
21	89.6	84.4	73.9	86.2	86.5	88.6	22.0	21.5	2.3	-1.5
23	89.6	84.0	74.2	86.9	87.1	89.7	21.0	20.0	2.6	-1.5
25	89.2	84.3	75.3	86.9	86.5	88.7	20.5	21.0	2.3	-1.3
27	88.8	83.7	74.3	86.9	86.5	88.8	20.5	20.5	2.3	-1.4
29	88.6	83.5	73.8	87.2	86.8	89.1	20.5	19.5	2.2	-1.3
31	89.5	84.4	74.2	87.4	87.4	89.7	21.5	21.0	2.3	-1.4
33	88.9	83.5	73.6	86.7	86.7	89.1	21.5	20.0	2.4	-1.3
Avg.	89.2	84.0	74.2	86.9	86.8	89.1	21.1	20.5	2.3	-1.4
Std Dv	0.4	0.4	0.5	0.4	0.3	0.4	0.6	0.7	0.1	0.1
TAKEOFF - MAXIMUM POWER										
35	89.4	84.1	74.0	87.7	87.1	89.5	22.0	22.0	2.4	-1.4
37	89.7	84.3	74.3	87.6	87.2	89.5	19.5	19.0	2.4	-1.4
39	89.6	84.2	74.6	87.8	87.7	90.0	20.5	20.0	2.4	-1.5
41	89.7	84.4	73.5	87.6	87.5	90.1	23.0	19.5	2.6	-1.3
Avg.	89.6	84.3	74.1	87.7	87.4	89.8	21.2	20.1	2.4	-1.4
Std Dv	0.1	0.1	0.5	0.1	0.3	0.3	1.6	1.3	0.1	0.1
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%										
43	94.1	90.0	81.6	91.6	93.1	94.8	23.5	24.5	1.8	-0.8
44	94.5	91.5	83.4	92.9	94.3	96.2	15.5	15.5	1.9	-0.7
45	94.3	89.8	82.3	92.1	93.4	95.3	16.5	20.5	1.9	-0.9
46	93.8	90.5	83.6	91.3	94.6	96.0	11.0	14.5	1.4	-0.8
47	94.3	90.0	82.1	92.6	92.8	94.7	15.5	18.5	1.8	-0.9
Avg.	94.2	90.3	82.6	92.1	93.6	95.4	16.4	18.7	1.8	-0.8
Std Dv	0.3	0.7	0.9	0.7	0.8	0.7	4.5	4.0	0.2	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.6-2.1

BELL 206-L HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
11/24/80

SITE: 1 CENTERLINE - CENTER JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
1	90.9	87.3	81.1	88.6	93.9	95.0	10.5	10.0	1.1	-0.5
2	89.3	85.6	79.9	88.1	92.8	93.9	8.5	8.5	1.1	-0.8
3	90.5	86.9	80.8	88.6	93.9	95.1	9.0	8.5	1.2	-0.6
4	90.3	86.7	81.5	89.4	94.4	95.5	8.0	7.5	1.2	-0.7
Avg.	90.2	86.6	80.8	88.7	93.7	94.8	9.0	8.6	1.1	-0.7
Std Dv	0.7	0.7	0.7	0.5	0.7	0.7	1.1	1.0	0.1	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
5	86.5	83.3	73.9	83.6	86.3	87.3	19.5	19.5	0.9	-0.8
6	83.6	80.5	71.4	82.4	83.2	83.9	19.0	19.0	0.7	-0.8
7	85.7	82.4	72.8	81.7	84.8	85.9	23.5	23.0	1.2	-0.7
8	84.4	81.2	72.0	82.5	83.9	84.8	18.5	18.5	1.3	-0.9
Avg.	85.0	81.8	72.5	82.5	84.6	85.4	20.1	20.0	1.0	-0.8
Std Dv	1.3	1.2	1.1	0.8	1.3	1.4	2.3	2.0	0.2	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
9	83.3	80.3	69.5	78.4	81.2	82.3	27.5	29.0	0.9	-0.8
10	82.7	79.8	70.1	80.0	81.0	83.0	22.5	22.5	1.9	-0.9
11	83.3	80.6	69.0	79.7	80.9	82.2	30.5	29.5	1.3	-0.8
12	81.3	78.3	67.9	78.1	79.7	80.8	27.0	26.0	1.1	-0.8
Avg.	82.6	79.8	69.1	79.1	80.7	82.1	26.9	26.7	1.3	-0.8
Std Dv	0.9	1.0	0.9	0.9	0.7	0.9	3.3	3.2	0.5	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-3.1

BELL 206L HELICOPTER

DOT/TSC
11/24/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1 CENTERLINE - CENTER JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
13	80.4	77.8	65.3	74.7	76.9	78.2	55.5	42.0	1.3	-0.5
14	78.5	75.7	64.5	74.5	76.3	77.5	38.0	37.0	1.2	-0.7
15	79.9	77.1	64.3	74.6	76.0	77.1	48.5	58.0	1.1	-0.8
16	78.6	75.7	63.8	74.7	75.3	76.5	38.0	41.0	1.2	-0.9
Avg.	79.3	76.6	64.5	74.6	76.1	77.3	45.0	44.5	1.2	-0.7
Std Dv	0.9	1.1	0.6	0.1	0.6	0.7	8.6	9.3	0.1	0.2
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
17	77.2	74.6	61.8	71.2	73.1	74.6	57.5	52.5	1.5	-0.9
18	75.8	73.3	60.2	70.9	71.5	72.7	49.0	48.0	1.8	-1.0
19	76.7	74.2	60.8	70.3	72.2	73.6	63.0	62.5	1.3	-0.9
Avg.	76.6	74.0	60.9	70.8	72.3	73.6	56.5	54.3	1.6	-0.9
Std Dv	0.7	0.6	0.8	0.4	0.8	1.0	7.1	7.4	0.3	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

R

TABLE NO. A.6-2.1G

BELL 206L HELICOPTER

DOT/TSC
12/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G   CENTERLINE - CENTER (FLUSH)   JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
1	94.4	90.4	84.7	92.3	97.3	98.7	8.5	9.0	1.4	-0.4
2	92.8	89.0	83.5	91.9	96.3	97.6	8.0	7.5	1.3	-0.6
3	93.9	90.1	84.3	92.6	96.8	98.4	8.5	8.0	1.7	-0.6
4	93.6	90.1	84.8	93.1	97.6	98.8	8.0	7.0	1.1	-0.5
Avg.	93.7	89.9	84.3	92.5	97.0	98.3	8.2	7.9	1.4	-0.5
Std Dv	0.7	0.6	0.6	0.5	0.6	0.5	0.3	0.9	0.2	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
5	89.9	86.8	78.4	87.9	90.7	91.8	16.0	15.5	1.2	-0.2
6	87.2	84.2	74.9	86.1	86.7	87.8	18.0	17.5	1.2	-0.4
7	89.0	85.6	76.4	85.4	88.6	90.2	20.0	18.0	1.9	-0.4
8	87.6	84.5	75.4	86.0	87.5	88.8	18.0	17.0	1.3	-0.5
Avg.	88.4	85.2	76.3	86.3	88.4	89.6	18.0	17.0	1.4	-0.4
Std Dv	1.3	1.2	1.5	1.1	1.7	1.8	1.6	1.1	0.4	0.1
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
9	86.8	83.8	73.7	82.2	85.6	86.8	25.0	24.0	1.2	-0.3
10	85.7	82.9	72.5	83.2	84.3	85.7	23.5	23.0	1.3	-0.5
11	86.5	83.9	73.1	82.8	85.1	86.4	27.0	25.0	1.3	-0.2
12	84.8	82.0	71.9	82.1	83.8	84.9	25.5	23.5	1.2	-0.4
Avg.	86.0	83.1	72.8	82.6	84.7	85.9	25.2	23.9	1.3	-0.3
Std Dv	0.9	0.9	0.8	0.5	0.8	0.8	1.4	0.9	0.1	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-3.1G

BELL 206L HELICOPTER

DOT/TSC
12/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1G   CENTERLINE - CENTER (FLUSH)   JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
13	84.2	81.3	69.4	78.7	81.2	82.9	37.0	34.0	1.6	-0.5
14	82.7	79.9	68.5	79.0	80.6	81.6	37.5	34.5	1.0	-0.5
15	83.6	80.9	68.6	78.4	80.6	81.8	40.0	40.0	1.4	-0.2
16	84.1	81.5	70.0	79.3	81.6	82.7	33.0	35.5	1.0	-0.6
Avs.	83.7	80.9	69.2	78.9	81.0	82.2	36.9	36.0	1.3	-0.5
Std Dv	0.7	0.7	0.7	0.4	0.5	0.7	2.9	2.7	0.3	0.2
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
17	81.3	78.6	65.5	75.7	77.0	78.8	56.0	43.5	1.8	-0.7
18	79.9	77.6	64.8	75.4	76.2	77.8	47.5	40.0	1.6	-0.6
19	-	78.2	65.3	74.7	76.8	78.4	50.0	-	1.6	-
Avs.	80.6	78.1	65.2	75.3	76.7	78.3	51.2	27.8	1.7	-0.6
Std Dv	0.9	0.5	0.4	0.5	0.4	0.5	4.4	24.2	0.1	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

BEST DOCUMENT AVAILABLE

TABLE NO. A.6-2.1H

BELL 206L HELICOPTER

DOT/TSC
12/ 2/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 1H   CENTERLINE - CENTER (10 METER)   JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
1	92.2	88.1	82.7	88.2	96.3	97.5	8.0	7.0	1.2	-0.9
2	91.1	86.8	81.6	87.4	95.4	96.3	8.0	6.5	1.4	-0.9
3	92.3	88.0	82.9	88.1	96.4	97.7	7.0	6.0	1.4	-1.0
4	92.3	87.9	83.2	89.0	96.9	98.2	7.0	6.0	1.3	-0.7
Avg.	92.0	87.7	82.6	88.2	96.2	97.4	7.5	6.4	1.3	-0.9
Std Dv	0.6	0.6	0.7	0.6	0.7	0.8	0.6	0.5	0.1	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
5	87.3	84.0	75.4	83.2	88.2	89.2	16.0	14.0	1.1	-0.6
6	83.1	79.8	72.1	77.0	84.3	85.3	13.5	13.0	1.0	-0.7
7	84.8	81.4	73.0	76.3	85.4	86.5	17.0	14.5	1.2	-1.0
8	83.6	80.2	72.3	76.7	84.7	85.8	14.0	13.0	1.2	-0.8
Avg.	84.7	81.3	73.2	78.3	85.6	86.7	15.1	13.6	1.1	-0.8
Std Dv	1.9	1.9	1.5	3.3	1.7	1.8	1.7	0.7	0.1	0.2
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
9	83.6	80.6	69.9	77.8	82.0	83.0	26.0	24.0	1.6	-0.6
10	83.3	80.5	69.9	78.4	81.8	82.9	27.0	25.5	1.1	-0.6
11	-	79.3	68.1	78.1	80.1	81.3	27.5	-	1.2	-
12	80.7	77.6	67.9	77.2	79.9	80.7	26.0	25.5	0.7	-0.6
Avg.	82.6	79.5	68.9	77.9	80.9	82.0	26.6	18.7	1.2	-0.6
Std Dv	1.6	1.4	1.1	0.5	1.1	1.2	0.7	12.5	0.3	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-3.1H

BELL 206L HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
12/ 2/80

SITE: 1H CENTERLINE - CENTER (10 METER) JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
13	79.8	76.8	64.7	73.9	76.6	78.0	38.0	35.0	1.8	-0.8
14	77.6	74.6	63.4	73.5	75.4	76.1	38.0	37.5	0.7	-0.6
15	78.8	76.0	63.3	74.1	75.4	76.5	44.5	44.0	1.6	-0.4
16	77.9	74.9	63.2	74.2	75.3	76.3	40.0	38.5	0.9	-0.6
Avs.	78.5	75.6	63.7	73.9	75.7	76.7	40.1	38.7	1.3	-0.6
Std Dv	1.0	1.0	0.7	0.3	0.6	0.9	3.1	3.8	0.5	0.2
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
17	76.8	73.6	60.6	70.6	72.5	73.7	60.5	57.5	2.3	-1.0
18	75.9	72.9	59.6	70.4	71.2	72.5	53.5	51.5	1.5	-0.6
19	76.5	73.5	60.2	70.3	72.0	73.1	61.5	61.5	1.9	-0.7
Avs.	76.4	73.3	60.1	70.4	71.9	73.1	58.5	56.8	1.9	-0.8
Std Dv	0.5	0.4	0.5	0.1	0.6	0.6	4.4	5.0	0.4	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-2.2

BELL 206L HELICOPTER

DOT/TSC
11/25/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
1	92.1	88.5	82.1	89.7	95.1	96.0	10.5	9.5	0.8	-0.6
2	90.8	86.9	81.5	89.4	94.6	95.3	8.5	7.5	1.2	-0.8
3	91.6	88.0	81.9	90.2	94.9	95.9	9.5	9.0	1.0	-0.6
4	91.3	87.5	82.2	90.6	95.5	96.5	8.0	7.0	1.0	-0.6
Avs.	91.5	87.7	81.9	90.0	95.0	95.9	9.1	8.2	1.0	-0.7
Std Dv	0.6	0.7	0.3	0.5	0.4	0.5	1.1	1.2	0.2	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
5	87.2	83.8	74.7	83.9	87.3	88.2	19.0	18.5	0.9	-0.8
6	84.8	81.6	73.6	83.4	85.8	86.6	17.0	16.5	0.8	-0.8
7	86.6	83.2	73.6	83.1	86.1	87.2	24.0	20.5	1.1	-0.7
8	85.0	81.8	73.1	82.9	85.0	85.7	19.0	19.5	1.3	-0.7
Avs.	85.9	82.6	73.7	83.3	86.0	86.9	19.7	18.7	1.0	-0.7
Std Dv	1.2	1.1	0.7	0.5	0.9	1.0	3.0	1.7	0.2	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
9	84.1	81.1	70.1	79.7	82.3	83.3	29.0	27.0	1.0	-0.7
10	83.0	80.3	70.7	80.2	82.3	83.2	24.5	24.0	0.7	-0.8
11	83.8	81.2	70.6	80.3	82.9	83.9	31.5	26.5	1.1	-0.7
12	82.3	79.2	69.8	79.7	81.6	82.6	24.5	23.5	1.0	-0.7
Avs.	83.3	80.5	70.3	80.0	82.3	83.3	27.4	25.2	0.9	-0.7
Std Dv	0.8	0.9	0.4	0.3	0.5	0.5	3.5	1.8	0.2	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

DOT/TSC
11/25/80

TABLE NO. A.6-3.2

BELL 206L HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 2 CENTERLINE - 150 M. WEST JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
13	81.7	78.9	66.7	76.3	78.6	79.8	50.0	49.5	1.3	-0.8
14	79.4	76.6	64.9	76.1	76.4	77.2	39.5	39.5	0.7	-0.8
15	80.8	78.0	64.9	75.6	77.0	78.3	47.0	44.5	1.3	-0.7
16	79.6	76.8	64.9	76.1	76.4	77.5	40.0	38.0	1.1	-0.8
Avs.	80.4	77.6	65.3	76.0	77.1	78.2	44.1	42.9	1.1	-0.8
Std Dv	1.1	1.1	0.9	0.3	1.0	1.1	5.2	5.2	0.3	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
17	79.1	76.0	62.6	73.4	74.6	76.2	54.5	53.5	1.9	-1.0
18	77.1	74.4	61.8	72.0	73.4	74.7	49.0	49.5	1.2	-0.8
19	-	75.1	61.9	71.9	73.6	74.9	57.0	-	1.2	-
Avs.	78.1	75.2	62.1	72.4	73.9	75.3	53.5	34.3	1.4	-0.9
Std Dv	1.4	0.8	0.4	0.9	0.6	0.8	4.1	29.8	0.4	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-2.3

BELL 206L HELICOPTER

DOT/TSC
11/25/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 3 CENTERLINE - 150 M. EAST JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
1	91.2	87.6	80.5	89.1	93.3	94.4	12.0	12.5	1.1	-0.6
2	89.9	86.1	80.3	88.7	93.0	93.8	9.5	10.0	0.8	-0.8
3	91.1	87.3	80.5	89.5	93.7	94.8	11.0	10.0	1.2	-0.7
4	90.9	87.4	82.2	90.4	94.9	95.5	7.5	8.0	0.6	-0.7
Avs.	90.8	87.1	80.9	89.4	93.7	94.6	10.0	10.1	0.9	-0.7
Std Dv	0.6	0.7	0.9	0.7	0.8	0.7	2.0	1.8	0.3	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
5	87.2	83.8	74.1	84.2	86.2	87.4	19.5	23.0	1.2	-0.8
6	84.3	81.1	72.1	84.0	83.9	85.1	19.5	19.0	1.2	-0.8
7	86.4	83.0	72.9	82.2	85.0	86.4	25.0	24.0	1.5	-0.8
8	85.0	81.6	73.7	83.6	85.3	86.3	16.0	18.0	0.9	-0.9
Avs.	85.7	82.4	73.2	83.5	85.1	86.3	20.0	21.0	1.2	-0.8
Std Dv	1.3	1.2	0.9	0.9	1.0	0.9	3.7	2.9	0.2	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
9	83.8	80.8	69.1	79.7	81.2	82.6	32.5	30.5	1.4	-1.0
10		-----------		NO DATA		-----------				
11	83.5	80.9	69.9	80.2	80.7	81.8	31.0	32.0	1.3	-0.7
12	82.3	79.0	69.3	79.7	80.4	81.9	25.0	29.0	1.6	-0.8
Avs.	83.2	80.2	69.4	79.9	80.8	82.1	29.5	30.5	1.4	-0.8
Std Dv	0.8	1.1	0.4	0.3	0.4	0.4	4.0	1.5	0.1	0.1

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-3.3

BELL 206L HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
1/21/81

SITE: 3 CENTERLINE - 150 M. EAST JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
13	-	78.2	65.1	76.1	77.0	78.6	47.5	-	1.8	-
14	-	76.5	64.7	76.6	76.1	77.2	41.0	-	1.2	-
15	-	77.5	64.7	75.6	78.8	80.4	41.0	-	1.6	-
16	80.6	77.0	64.9	76.3	78.2	80.9	44.0	33.5	2.5	-0.6
Avs.	80.6	77.3	64.8	76.1	77.5	79.3	43.4	8.4	1.8	-0.6
Std Dv	-	0.7	0.2	0.4	1.2	1.7	3.1	16.7	0.6	-
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
17	-	75.4	61.6	73.2	73.4	74.7	58.5	-	1.5	-
18	-	74.1	61.5	72.5	73.0	74.8	46.5	-	1.7	-
19	-	75.1	60.6	71.7	72.8	74.5	63.5	-	1.7	-
Avs.	-	74.6	61.0	72.1	72.9	74.6	55.0	0.0	1.7	-
Std Dv	0.0	0.7	0.7	0.5	0.1	0.2	12.0	0.0	0.0	0.0

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-2.4

BELL 206L HELICOPTER

DOT/TSC
11/24/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 4 SIDELINE - 164M. NORTH JUNE 26,1980

300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1	88.4	85.3	76.9	86.8	88.1	89.6	19.0	18.5	1.5	-0.7
2	87.8	83.8	76.7	89.2	88.7	90.8	13.0	12.0	2.2	-0.6
3	88.3	85.3	76.9	86.8	88.2	89.3	18.0	18.5	1.2	-0.7
4	88.2	84.4	76.7	89.9	88.9	90.4	13.5	12.5	1.7	-0.5
Avs.	88.2	84.7	76.8	88.2	88.5	90.0	15.9	15.4	1.6	-0.6
Std Dv	0.3	0.7	0.1	1.6	0.4	0.7	3.1	3.6	0.4	0.1

700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
5	88.1	84.8	76.6	87.5	88.7	90.2	17.5	18.0	1.9	-0.7
6	84.9	81.9	72.8	86.0	84.1	85.6	20.0	20.0	2.0	-0.8
7	86.9	84.0	75.1	85.9	86.7	88.1	25.0	25.5	1.4	-0.9
8	85.0	82.1	73.0	86.8	84.7	85.9	18.0	19.5	1.2	-0.6
Avs.	86.2	83.2	74.4	86.5	86.0	87.5	20.1	20.7	1.6	-0.7
Std Dv	1.5	1.4	1.8	0.7	2.1	2.2	3.4	3.3	0.4	0.1

1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
9	85.5	82.2	71.5	83.1	84.4	86.0	26.5	23.5	1.7	-0.9
10	83.6	80.5	70.1	84.8	81.7	83.2	26.5	29.5	1.4	-0.6
11	85.8	82.5	71.9	83.1	85.0	86.7	30.5	21.5	1.8	-0.9
12	82.8	80.2	70.4	82.9	82.3	83.6	26.0	25.0	1.4	-0.6
Avs.	84.4	81.3	71.0	83.5	83.4	84.9	27.4	24.9	1.6	-0.8
Std Dv	1.5	1.1	0.9	0.9	1.6	1.8	2.1	3.4	0.2	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED
FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE
PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-3.4

BELL 206L HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
11/24/80

SITE: 4 SIDELINE - 164M, NORTH JUNE 26,1980

1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
13	82.9	79.7	67.9	79.9	80.7	82.6	37.0	32.5	1.9	-0.8
14	80.4	77.7	66.7	80.0	78.1	79.0	34.5	39.5	0.9	-0.6
15	82.6	79.6	67.6	79.4	80.4	82.5	42.0	30.0	2.0	-0.5
16	80.5	77.8	65.5	80.9	77.0	78.1	40.5	42.5	1.2	-0.7
Avg.	81.6	78.7	66.9	80.1	79.1	80.6	38.5	36.1	1.5	-0.7
Std Dv	1.4	1.1	1.1	0.6	1.8	2.3	3.4	5.9	0.6	0.1

2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
17	80.8	77.6	64.9	76.8	77.5	79.5	60.5	55.5	2.1	-1.0
18	78.4	75.4	62.6	76.9	74.2	75.1	54.0	54.5	1.0	-0.6
19	79.8	76.9	63.9	75.3	76.2	78.2	57.0	42.0	2.1	-0.7
Avg.	79.7	76.6	63.8	76.3	76.0	77.6	57.2	50.7	1.7	-0.8
Std Dv	1.2	1.1	1.1	0.9	1.7	2.3	3.3	7.5	0.6	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-2.5

BELL 206L HELICOPTER

DOT/TSC
11/24/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
1	87.6	84.2	76.3	88.5	88.5	89.6	14.5	13.5	1.1	-0.6
2	87.0	84.2	76.7	86.1	88.2	89.8	13.5	12.5	1.9	-0.9
3	87.9	84.6	76.7	88.7	88.9	90.1	14.0	12.5	1.2	-0.6
4	87.6	84.9	77.1	86.7	88.6	90.2	13.5	12.5	1.7	-0.7
Avs.	87.5	84.5	76.7	87.5	88.5	89.9	13.9	12.7	1.5	-0.7
Std Dv	0.3	0.3	0.3	1.3	0.3	0.3	0.5	0.5	0.4	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
5	85.4	82.4	73.3	86.4	85.1	86.7	20.5	21.0	1.5	-0.7
6	86.3	82.9	74.2	85.0	86.4	88.1	15.5	13.5	1.8	-1.1
7	84.9	82.3	72.7	84.9	84.8	86.1	26.0	20.5	1.4	-0.5
8	86.3	83.0	73.9	84.7	86.1	88.0	16.5	15.0	1.8	-1.1
Avs.	85.7	82.7	73.5	85.3	85.6	87.2	19.6	17.5	1.6	-0.9
Std Dv	0.7	0.3	0.6	0.8	0.8	1.0	4.8	3.8	0.2	0.3
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
9	82.3	79.8	68.4	82.0	80.2	81.3	33.5	28.5	1.1	-0.7
10	84.4	81.4	71.8	81.6	82.6	84.1	22.5	22.5	1.6	-0.8
11	82.4	79.9	68.3	82.4	79.8	81.5	34.5	34.5	1.7	-0.7
12	83.3	80.1	70.4	80.9	82.8	83.7	23.0	21.0	1.2	-1.0
Avs.	83.1	80.3	69.7	81.7	81.3	82.7	28.4	26.6	1.4	-0.8
Std Dv	1.0	0.7	1.7	0.6	1.6	1.5	6.5	6.2	0.3	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-3.5

BELL 206L HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
11/24/80

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
13	81.1	78.5	65.3	78.1	76.9	77.7	55.0	49.5	1.4	-0.7
14	80.8	77.5	66.6	76.2	79.0	79.7	30.0	26.5	0.9	-1.1
15	80.1	77.7	64.4	77.8	76.2	77.1	50.5	49.5	0.9	-0.7
16	80.6	77.5	66.1	76.8	78.2	79.8	32.0	29.0	1.7	-1.1
Avg.	80.6	77.8	65.6	77.2	77.5	78.6	41.9	38.6	1.2	-0.9
Std Dv	0.4	0.5	0.9	0.9	1.3	1.4	12.7	12.6	0.4	0.2
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
17	78.6	75.8	62.8	73.1	74.1	75.1	56.0	55.0	1.5	-1.0
18	77.9	74.9	62.7	73.3	74.5	75.8	43.0	41.0	1.4	-1.1
19	77.7	75.1	61.0	73.5	72.7	74.1	60.0	54.0	1.4	-0.8
Avg.	78.1	75.3	62.2	73.3	73.8	75.0	53.0	50.0	1.4	-1.0
Std Dv	0.5	0.5	1.0	0.2	0.9	0.9	8.9	7.8	0.1	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-2.5G

BELL 206L HELICOPTER

DOT/TSC
11/26/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
1	91.0	87.2	80.3	88.5	92.4	93.3	11.0	11.5	0.9	-0.5
2	90.6	87.2	80.7	87.1	93.0	94.3	10.5	10.0	1.5	-0.9
3	91.4	87.6	80.6	89.1	92.5	93.5	10.5	11.5	1.1	-0.4
4	91.0	87.4	80.7	87.5	93.3	94.6	10.5	10.0	1.4	-0.8
Avg.	91.0	87.3	80.6	88.1	92.8	93.9	10.6	10.7	1.2	-0.6
Std Dv	0.3	0.2	0.2	0.9	0.4	0.6	0.2	0.9	0.3	0.2
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
5	88.8	86.2	77.6	87.2	88.8	90.1	16.0	16.5	1.2	-0.4
6	89.6	86.3	77.9	86.3	89.9	91.6	14.5	13.0	1.8	-1.0
7	88.3	85.7	77.1	85.7	88.5	89.5	16.5	17.0	0.9	-0.3
8	89.7	86.6	78.1	86.2	90.4	92.1	14.5	12.5	1.7	-0.9
Avg.	89.1	86.2	77.7	86.4	89.4	90.8	15.4	14.7	1.4	-0.6
Std Dv	0.7	0.4	0.4	0.6	0.9	1.2	1.0	2.3	0.4	0.3
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
9	86.4	83.9	73.4	83.3	84.9	85.7	25.0	25.0	1.1	-0.3
10	87.9	85.0	74.4	83.1	86.2	87.9	23.5	22.5	1.7	-0.9
11	85.8	83.5	72.9	83.3	83.8	85.0	24.0	26.0	1.3	-0.3
12	86.8	83.7	73.6	82.5	85.5	86.9	23.5	21.5	1.6	-1.0
Avg.	86.7	84.1	73.6	83.1	85.1	86.4	24.0	23.7	1.4	-0.7
Std Dv	0.9	0.7	0.6	0.4	1.0	1.3	0.7	2.1	0.3	0.4

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-3.5G

BELL 206L HELICOPTER

SUMMARY NOISE LEVEL DATA

AS MEASURED *

DOT/TSC
11/26/80

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
13	84.2	81.8	69.6	79.4	81.7	82.5	37.0	35.5	0.7	-0.4
14	83.8	80.8	70.1	78.3	82.0	83.4	28.5	25.5	1.5	-0.9
15	83.5	81.4	68.7	79.5	80.4	81.0	39.5	38.0	0.9	-0.2
16	84.1	81.1	70.0	78.8	81.4	82.8	31.0	28.5	1.7	-0.9
Avg.	83.9	81.3	69.6	79.0	81.4	82.4	34.0	31.9	1.2	-0.6
Std Dv	0.3	0.4	0.6	0.6	0.7	1.0	5.1	5.9	0.5	0.4
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
17	82.0	79.3	67.8	75.9	79.6	81.2	40.5	36.5	1.7	-0.7
18	81.5	78.5	66.9	75.5	78.4	80.1	37.0	32.0	1.7	-1.1
19	81.1	78.8	65.8	75.4	77.4	78.6	50.0	45.5	1.1	-0.4
		----------		NO DATA		----------				
Avg.	81.5	78.9	66.8	75.6	78.5	80.0	42.5	38.0	1.5	-0.7
Std Dv	0.5	0.4	1.0	0.3	1.1	1.3	6.7	6.9	0.3	0.4

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-2.6

BELL 206L HELICOPTER

DOT/TSC
11/26/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
1	85.4	83.2	72.4	80.5	83.3	84.8	27.5	27.0	1.5	-0.3
2	82.7	79.7	70.6	82.5	81.8	82.7	19.0	21.5	1.2	-0.3
3	85.1	82.7	72.4	80.2	83.0	84.5	25.0	25.0	1.5	-0.2
4	83.2	80.4	71.4	82.8	82.4	83.8	18.5	18.0	1.5	0.1
Avg.	84.1	81.5	71.7	81.5	82.6	83.9	22.5	22.9	1.4	-0.2
Std Dv	1.3	1.7	0.9	1.3	0.6	0.9	4.5	4.0	0.2	0.1
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
5	85.2	82.5	72.4	83.7	83.2	84.9	26.0	27.5	1.9	-0.8
6	82.6	80.0	70.2	82.7	81.4	82.5	23.5	25.0	1.1	-0.6
7	84.2	81.5	71.0	81.8	81.7	83.5	28.5	31.0	1.8	-0.9
8	82.4	79.6	69.5	83.3	81.4	82.5	24.5	23.5	1.2	-0.5
Avg.	83.6	80.9	70.8	82.8	81.9	83.4	25.6	26.7	1.5	-0.7
Std Dv	1.3	1.3	1.3	0.8	0.8	1.1	2.2	3.3	0.4	0.2
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
9	83.6	80.6	70.3	81.9	81.7	83.1	27.5	30.0	1.3	-0.6
10	81.4	78.6	67.8	82.8	79.6	81.0	29.5	27.5	1.4	-0.6
11	84.0	81.0	70.1	82.2	82.1	83.5	32.0	31.5	1.4	-0.9
12	80.7	78.1	68.0	80.6	79.9	81.6	24.5	23.0	1.7	-0.5
Avg.	82.4	79.6	69.1	81.9	80.8	82.3	28.4	28.0	1.5	-0.6
Std Dv	1.6	1.5	1.4	0.9	1.3	1.2	3.2	3.7	0.2	0.2

* - INDEXES (A,D, .ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

TABLE NO. A.6-3.6

BELL 206L HELiCOPTER

DOT/TSC
11/26/80

SUMMARY NOISE LEVEL DATA

AS MEASURED *

SITE: 6 SIDELINE - 284 M. NORTH JUNE 26,1980

EV	EPNL	NEL	DBA(M)	OASPL	PNL(M)	PNLT(M)	DUR(A)	DUR(P)	TC	/**
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
13	81.3	78.4	66.4	78.9	78.0	79.3	41.0	46.0	1.3	-0.8
14	78.8	76.6	65.0	78.6	75.8	77.0	37.5	41.0	1.2	-0.5
15	81.8	79.0	67.4	79.4	79.3	80.8	38.0	34.5	1.5	-0.9
16	79.4	76.9	64.6	79.9	75.8	77.1	40.5	39.0	1.3	-0.3
Avs.	80.3	77.7	65.8	79.2	77.2	78.5	39.2	40.1	1.3	-0.6
Std Dv	1.4	1.2	1.3	0.6	1.7	1.8	1.8	4.8	0.1	0.3
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS										
17	79.5	76.3	63.4	76.0	75.4	77.0	50.0	45.0	1.6	-0.9
18	77.6	74.9	63.5	76.5	74.7	75.9	47.0	46.5	1.3	-0.7
19	79.9	76.6	62.9	75.4	75.4	77.4	63.5	60.0	1.9	-0.7
Avs.	79.0	75.9	63.2	76.0	75.2	76.8	53.5	50.5	1.6	-0.8
Std Dv	1.2	0.9	0.3	0.6	0.4	0.8	8.8	8.3	0.3	0.1

* - INDEXES (A,D, ,ETC.) CALCULATED USING MEASURED DATA UNCORRECTED FOR TEMPERATURE,HUMIDITY,AND AIRCRAFT DEVIATION FROM FLIGHT TRACK

** - /\ ,THE CHANGE IN EPNL ASSUMING TONES 800 Hz AND BELOW TO BE PSEUDOTONES AND EXCLUDING THEM FROM THE PNLT CALCULATIONS

APPENDIX B

CORRECTED ACOUSTICAL DATA

Appendix B

Appendix B provides corrected acoustical data (previously discussed in Section 3) using "As Measured" acoustical data from Appendix A and applying adjustments as follows:

1. Appendix C position and tracking data along with Appendix E meteorological data are used to correct dBA(m) and PNLTM for distance deviations from reference paths and differences between test day absorption and reference day absorption. This correction is identified as Delta 1(P) for PNLT and Delta 1(A) for dBA. Concise details for computing Delta 1 corrections are provided in FAR-36.

2. The Delta 2(P) and Delta 2(A) corrections are applied to EPNL and NEL respectively in order to account for changes in event duration associated with deviations in altitude from reference conditions. The Delta 2 corrections are computed as follows:

   $$\text{Delta } 2 = k \log(d1/d2)$$

   where k has traditionally been taken as equal to 10. In hope of improving upon the performance of k=10, the constants k(P) and k(A) have been derived for each specific event and used to compute Delta 2(P) and Delta 2(A) respectively. The derivation is consistent with FAR-36 data correction assumptions and simple Exposure Level or energy dose as equal to the maximum transient sound level plus a function of the event duration expressed in seconds. The constant k(A)=10 can be re-evaluated by using measured SEL, dBAm and DUR then solving for k(A), k(A)=SEL-dBAm/log(DUR). k(A) is significant as an indicator of event duration influence on Sound Exposure Level. If we assume (as in FAR-36) that event duration is proportional to distance then the values of k(A) can be used to account for changes in SEL with changes in distance.

   The same line of reasoning applies to EPNL, PNLTM and DUR(P) with an adjustment necessary to account for the 10 second normalization duration time factor (T) appearing in the EPNL calculation. Thus k(P)=(EPNL+10-PNLTM)/(log DUR(P)). It is anticipated that this procedure for computing DELTA 2 will be more accurate than the use of 10 log (d1/d2).

In addition to the adjustments discussed above we have provided certain key position information. The final four columns on each table show:

1. the actual closest point of approach (CPA) to the microphone.
2. the actual helicopter slant range (SR) at the time of PNLTM.
3. the reference CPA identified CPAR and,
4. the reference slant range (SRR).

Attachment

Appendix B

Corrected Noise Level Data are presented.

The key to the table numbering system is as follows:

Table No. B. 1-1. 1

Appendix No. → B.

Helicopter No. & Operation → 1-1.

Microphone location → 1

Table No.		Takeoff Approach	Flyover 500 ft	Flyover 300-1500 ft	Type	Date
	B.	1-1.	1-2,	1-3	Sikorsky UH-60A	June 22, 1980
		2-1,	2-2,	2-3	Sikorsky S-76	June 23, 1980
		3-1,	3-2,	3-3	Augusta A-109	June 24, 1980
		4-1,	4-2,	4-3	Sikorsky S-76	June 25, 1980
		5-1,	5-2,	5-3	Sikorsky UH-60A	June 25, 1980
		6-1,	6-2,	6-3	Bell 206L	June 26, 1980
	B.	7-1,	7-2,	7-3	Sikorsky UH-60A	June 26, 1980

Microphone Location		
	1	centerline-center
	1H	centerline-center 10 meter
	1G	centerline-center (flush)
	2	centerline 150m west
	3	centerline 150m east
	4	sideline 164m north
	5	sideline 150m south
	5G	sideline 150m south (flush)
	6	sideline 284m north

TABLE NO. B.1-1.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/12/81

SITE: 1 CENTERLINE - CENTER JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
16	97.5	93.1	99.4	84.6	0.45	0.43	-0.17	-0.17	7.0	7.4	133.4	126.3	124.9	118.2
17	98.9	94.3	102.7	87.5	-0.22	-0.21	0.05	0.05	6.0	6.3	124.4	126.6	116.2	118.2
18	99.2	94.4	102.8	87.5	-0.02	-0.01	-0.01	-0.01	6.3	6.5	129.6	129.1	118.7	118.2
19	99.1	94.4	102.9	87.6	0.34	0.34	-0.11	-0.12	6.0	6.4	129.1	123.8	123.3	118.2
20	99.5	94.8	103.4	87.7	0.41	0.41	-0.13	-0.15	6.1	6.8	130.4	124.1	124.2	118.2
21	99.1	94.4	102.9	87.8	0.09	0.09	-0.04	-0.04	6.1	6.2	129.0	127.1	120.0	118.2
22	99.0	94.2	102.9	87.3	0.34	0.33	-0.11	-0.12	6.3	6.8	128.6	123.4	123.2	118.2
23	99.7	95.1	103.8	89.0	0.00	-0.01	0.00	0.00	5.8	5.9	131.7	131.5	118.4	118.2
24	99.4	94.6	103.1	87.8	0.17	0.15	-0.05	-0.06	6.4	6.6	127.1	124.7	120.6	118.2
Avs.	99.0	94.4	102.7	87.4	0.17	0.17	-0.06	-0.07	6.2	6.5	129.3	126.3	121.1	118.2
Std Dv	0.7	0.6	1.3	1.2	0.24	0.24	0.08	0.08	0.4	0.4	2.8	2.9	3.2	0.0
TAKEOFF														
8	90.5	86.0	92.4	78.0	1.03	0.97	-0.38	-0.37	7.4	7.2	169.8	151.0	155.9	138.6
9	90.2	85.7	91.8	77.7	1.93	1.82	-0.59	-0.63	6.6	7.1	170.8	139.2	170.1	138.6
10	89.6	85.2	91.9	76.2	2.29	2.17	-0.70	-0.81	6.7	7.8	178.5	140.5	176.2	138.6
11	89.8	85.5	92.0	76.6	3.05	2.92	-0.94	-1.04	6.9	7.6	191.6	139.7	190.2	138.6
12	89.7	85.5	92.6	76.3	2.08	1.97	-0.60	-0.69	6.3	7.2	173.6	139.6	172.4	138.6
13												NO TRACKING DATA		
14	91.1	86.5	92.9	76.8	2.68	2.56	-0.78	-0.90	6.5	7.6	187.0	142.1	182.4	138.6
15	90.7	86.2	92.5	76.4	2.52	2.41	-0.75	-0.88	6.6	7.7	181.6	139.9	180.0	138.6
Avs.	90.2	85.8	92.3	76.9	2.23	2.12	-0.68	-0.76	6.7	7.5	179.0	141.7	175.3	138.6
Std Dv	0.6	0.5	0.4	0.8	0.71	0.69	0.19	0.24	0.4	0.3	9.1	4.6	11.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 100 KTS														
52	90.8	87.1	93.1	79.8	-0.46	-0.43	0.12	0.11	6.9	6.8	155.5	161.6	145.5	151.2
Avs.	90.8	87.1	93.1	79.8	-0.46	-0.43	0.12	0.11	6.9	6.8	155.5	161.6	145.5	151.2
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.1-2.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/12/81

SITE: 1 CENTERLINE - CENTER JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
27	93.6	89.9	95.2	81.9	-0.04	-0.04	-0.01	-0.01	7.0	6.7	160.1	159.5	151.8	151.2
30	92.9	89.3	95.4	82.5	0.40	0.35	-0.13	-0.12	7.2	6.6	176.9	169.4	157.8	151.2
33	93.9	90.4	94.8	81.9	-0.21	-0.21	0.05	0.05	7.7	7.4	257.5	261.6	148.8	151.2
36	92.4	88.7	94.8	81.4	0.21	0.18	-0.07	-0.07	7.1	6.9	214.8	209.8	154.7	151.2
Avs.	93.2	89.6	95.1	81.9	0.09	0.07	-0.04	-0.04	7.3	6.9	202.3	200.1	153.3	151.2
Std Dv	0.8	0.9	0.4	0.5	0.33	0.30	0.09	0.09	0.4	0.4	53.0	56.9	4.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 132 KTS														
26	94.6	91.1	97.2	84.1	0.12	0.10	-0.06	-0.06	7.1	7.1	285.3	279.8	154.1	151.2
29	94.8	91.4	97.3	83.8	-0.11	-0.13	0.02	0.02	7.0	7.2	211.0	212.4	150.2	151.2
32	94.1	90.8	97.4	84.6	-0.52	-0.49	0.12	0.11	6.3	6.1	154.1	160.9	144.8	151.2
35	94.3	90.7	96.4	83.1	-0.04	-0.08	0.01	0.01	7.3	7.1	186.6	186.9	150.9	151.2
Avs.	94.4	91.0	97.1	83.9	-0.14	-0.15	0.02	0.02	6.9	6.9	209.3	210.0	150.0	151.2
Std Dv	0.4	0.4	0.6	0.8	0.33	0.30	0.09	0.09	0.5	0.7	68.4	62.6	4.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
25	96.8	93.3	98.9	85.3	1.19	1.11	-0.40	-0.41	7.6	7.8	344.6	305.1	170.7	151.2
28	96.4	92.5	100.0	86.7	0.71	0.66	-0.19	-0.20	6.1	6.1	180.6	167.7	162.8	151.2
31	97.4	94.1	100.9	87.5	-0.24	-0.24	0.05	0.05	6.4	6.6	240.5	245.0	148.4	151.2
34	97.2	93.8	100.4	86.8	0.23	0.21	-0.08	-0.08	6.9	7.0	258.5	251.6	155.4	151.2
Avs.	97.0	93.4	100.0	86.6	0.47	0.43	-0.15	-0.16	6.7	6.9	256.0	242.4	159.3	151.2
Std Dv	0.5	0.9	1.0	1.1	0.75	0.71	0.23	0.24	0.8	0.9	83.0	69.3	11.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 165 KTS														
49	95.2	91.1	98.1	83.7	-0.53	-0.51	0.15	0.15	6.6	6.9	205.8	216.6	143.6	151.2
50	96.4	92.4	98.9	85.6	-1.67	-1.64	0.46	0.46	6.5	6.5	179.0	210.3	128.6	151.2
51	96.2	92.2	98.6	84.7	0.56	0.52	-0.18	-0.18	7.1	7.1	275.6	260.1	160.2	151.2
Avs.	95.9	91.9	98.5	84.7	-0.55	-0.54	0.14	0.14	6.7	6.8	220.1	229.0	144.1	151.2
Std Dv	0.9	1.0	0.6	1.4	1.58	1.53	0.45	0.45	0.5	0.4	70.5	38.3	22.3	0.0

TABLE NO. B.1-3.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/12/81

SITE: 1 CENTERLINE - CENTER JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
43	-	94.5	102.4	88.9	-0.09	-0.11	-	0.02	-	6.6	136.2	137.4	89.4	90.2
44	98.6	95.1	102.9	88.9	-0.31	-0.32	0.09	0.09	6.5	6.9	116.4	120.2	87.4	90.2
Avg.	98.6	94.8	102.6	88.9	-0.20	-0.21	0.09	0.05	6.5	6.7	126.3	128.8	88.4	90.2
Std Dv	-	0.4	0.4	0.0	0.16	0.15	-	0.05	-	0.2	14.0	12.2	1.4	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
41	93.0	90.1	95.2	81.9	0.13	0.10	-0.05	-0.05	6.8	7.2	285.6	280.9	215.7	212.1
42	93.3	90.0	94.5	82.0	0.10	0.08	-0.04	-0.04	7.1	6.6	281.1	277.3	215.0	212.1
Avg.	93.2	90.0	94.8	81.9	0.12	0.09	-0.04	-0.04	7.0	6.9	283.3	279.1	215.3	212.1
Std Dv	0.2	0.0	0.5	0.1	0.02	0.01	0.01	0.01	0.3	0.4	3.2	2.5	0.4	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
1	91.2	88.3	92.9	80.2	-0.31	-0.28	0.00	0.00	7.1	7.0	455.2	454.5	304.1	303.6
2	91.7	88.3	92.3	78.7	0.26	0.25	-0.17	-0.17	7.5	7.6	609.0	577.6	320.1	303.6
3	91.1	88.1	91.2	77.8	-0.25	-0.29	-0.01	-0.01	7.7	7.8	378.8	377.9	304.2	303.6
4	91.6	88.9	91.4	79.5	-0.22	-0.20	-0.03	-0.03	7.7	7.3	573.4	567.6	306.7	303.6
5	91.0	88.3	91.8	79.2	-0.19	-0.24	-0.03	-0.03	7.1	7.4	395.6	391.3	306.9	303.6
6												NO TRACKING DATA		
40	91.4	88.6	91.9	79.2	-0.07	-0.06	0.00	0.00	7.8	7.6	463.3	462.7	304.0	303.6
47	90.8	87.9	92.0	79.0	1.05	0.95	-0.29	-0.29	6.7	6.7	627.4	568.6	334.9	303.6
48	90.2	87.4	91.0	78.7	-0.12	-0.14	0.01	0.01	7.2	7.1	364.1	365.7	302.2	303.6
Avg.	91.1	88.2	91.8	79.0	0.02	-0.00	-0.06	-0.06	7.4	7.3	483.3	470.7	310.4	303.6
Std Dv	0.5	0.5	0.7	0.7	0.49	0.46	0.12	0.12	0.4	0.4	114.5	97.2	12.3	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
37	-	86.1	88.9	75.9	-0.12	-0.11	-	-0.01	-	7.7	1010.5	1008.6	456.8	456.0
38	88.2	85.8	88.3	76.0	0.10	0.09	-0.06	-0.06	7.4	7.3	811.9	797.1	464.4	456.0
45												NO TRACKING DATA		
46												NO TRACKING DATA		
Avg.	88.2	85.9	88.6	75.9	-0.01	-0.01	-0.06	-0.03	7.4	7.5	911.2	902.8	460.6	456.0
Std Dv	-	0.2	0.4	0.1	0.16	0.14	-	0.04	-	0.2	99.3	105.8	5.4	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. D.1-1.10

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/12/81

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 22,1980

EV	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
16	102.5	98.2	103.1	89.3	0.45	0.43	-0.18	-0.17	7.8	7.4	127.5	120.8	126.1	119.4
17	101.0	96.7	103.5	89.4	-0.24	-0.22	0.05	0.05	6.9	6.7	135.3	137.7	117.4	119.4
18	102.0	97.5	104.6	90.2	-0.02	-0.01	-0.01	-0.01	7.0	6.8	120.9	120.4	119.9	119.4
19	102.2	97.8	104.9	90.5	0.38	0.36	-0.12	-0.12	6.8	6.7	130.4	125.1	124.5	119.4
20	102.5	98.1	105.6	90.6	0.41	0.40	-0.15	-0.15	6.8	7.2	131.6	125.3	125.4	119.4
21	102.1	97.7	105.0	90.8	0.09	0.09	-0.04	-0.04	6.9	6.6	130.4	128.4	121.2	119.4
22	102.1	97.7	105.3	90.4	0.33	0.32	-0.12	-0.13	6.8	7.1	129.9	124.7	124.4	119.4
23	102.4	98.0	105.4	91.9	-0.02	-0.01	-0.01	0.00	6.6	5.9	133.0	132.8	119.6	119.4
24	102.0	97.7	104.9	90.6	0.16	0.15	-0.06	-0.06	6.9	6.9	136.8	134.2	121.8	119.4
Avg.	102.1	97.7	104.7	90.4	0.17	0.17	-0.07	-0.07	6.9	6.8	130.6	127.7	122.3	119.4
Std Dv	0.5	0.5	0.9	0.8	0.25	0.24	0.08	0.08	0.4	0.4	4.9	6.4	3.2	0.0
TAKEOFF														
8	94.7	90.0	96.4	82.2	1.00	0.95	-0.38	-0.36	7.5	7.2	171.0	152.2	157.0	139.8
9	94.2	89.9	95.4	81.8	1.93	1.80	-0.68	-0.63	7.7	7.2	172.1	140.5	171.2	139.8
10	93.8	89.4	94.7	81.0	2.30	2.14	-0.81	-0.77	7.8	7.4	177.5	139.9	177.3	139.8
11	93.6	89.4	94.3	81.0	3.03	2.89	-1.08	-1.00	7.9	7.4	199.9	146.1	191.3	139.8
12	93.6	89.2	94.6	80.5	2.05	1.94	-0.72	-0.71	7.7	7.6	177.9	143.2	173.6	139.8
13											NO TRACKING DATA			
14	95.3	90.7	96.1	81.6	2.71	2.52	-0.90	-0.91	7.6	7.7	192.7	146.8	183.6	139.8
15	94.7	90.2	95.9	81.1	2.57	2.38	-0.85	-0.87	7.6	7.8	190.7	147.1	181.2	139.8
Avg.	94.3	89.8	95.4	81.3	2.23	2.09	-0.77	-0.75	7.7	7.5	183.1	145.1	176.5	139.8
Std Dv	0.7	0.6	0.9	0.7	0.72	0.68	0.24	0.23	0.2	0.2	12.3	4.7	11.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 100 KTS														
52	94.8	91.2	97.2	84.0	-0.44	-0.42	0.11	0.12	6.9	7.0	156.6	162.7	146.7	152.4
Avg.	94.8	91.2	97.2	84.0	-0.44	-0.42	0.11	0.12	6.9	7.0	156.6	162.7	146.7	152.4
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0

TABLE NO. B.1-2.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/12/81

CORRECTION DATA

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
27	97.3	93.4	99.4	85.7	-0.03	-0.04	-0.01	-0.01	6.6	6.7	161.5	160.9	153.0	152.4
30	96.5	92.8	99.4	86.1	0.38	0.35	-0.13	-0.12	7.0	6.7	165.8	158.9	159.0	152.4
33	97.7	94.2	99.4	86.1	-0.22	-0.21	0.05	0.05	7.4	7.2	159.7	162.3	150.0	152.4
36	96.6	92.7	98.8	85.5	0.19	0.17	-0.07	-0.07	7.2	6.9	163.2	159.5	156.0	152.4
Avs.	97.0	93.3	99.2	85.8	0.08	0.07	-0.04	-0.04	7.0	6.9	162.5	160.4	154.5	152.4
Std Dv	0.7	0.8	0.4	0.4	0.32	0.30	0.09	0.09	0.4	0.3	3.2	1.9	4.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 132 KTS														
26	98.1	94.5	101.1	87.6	0.13	0.10	-0.06	-0.06	7.0	7.3	249.5	244.8	155.4	152.4
29	98.8	95.3	101.4	88.1	-0.12	-0.13	0.02	0.02	7.0	7.2	211.9	213.2	151.4	152.4
32	98.0	94.5	101.1	87.5	-0.50	-0.49	0.12	0.12	6.6	6.7	197.2	205.8	146.0	152.4
35	98.5	94.9	100.6	87.2	-0.05	-0.08	0.01	0.01	7.3	7.4	211.3	211.7	152.1	152.4
Avs.	98.3	94.8	101.1	87.6	-0.13	-0.15	0.02	0.02	7.0	7.2	217.5	218.9	151.2	152.4
Std Dv	0.5	0.5	0.4	0.5	0.32	0.30	0.09	0.09	0.3	0.4	27.5	21.5	4.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
25	100.5	96.8	102.7	89.3	1.17	1.11	-0.39	-0.40	7.5	7.6	211.7	187.6	172.0	152.4
28	99.8	95.7	103.7	89.7	0.69	0.65	-0.19	-0.21	5.9	6.5	208.4	193.7	164.0	152.4
31	100.9	97.6	104.0	91.0	-0.25	-0.25	0.06	0.05	7.0	6.7	241.2	245.8	149.6	152.4
34	100.5	96.8	104.1	90.0	0.23	0.20	-0.08	-0.08	6.5	6.7	259.2	252.3	156.6	152.4
Avs.	100.4	96.7	103.6	90.0	0.46	0.43	-0.15	-0.16	6.7	6.9	230.1	219.9	160.5	152.4
Std Dv	0.6	1.0	0.8	0.9	0.75	0.72	0.23	0.24	0.8	0.6	29.8	41.5	11.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 165 KTS														
49	100.3	96.4	103.2	90.2	-0.60	-0.61	0.15	0.14	6.9	6.2	308.9	325.1	144.8	152.4
50	100.1	96.3	103.1	89.9	-1.74	-1.65	0.44	0.42	6.3	6.1	180.4	211.8	129.8	152.4
51	100.2	96.2	102.7	89.6	0.54	0.51	-0.18	-0.16	7.2	6.6	205.6	194.1	161.4	152.4
Avs.	100.2	96.3	103.0	89.9	-0.60	-0.58	0.14	0.13	6.8	6.3	231.6	243.7	145.4	152.4
Std Dv	0.1	0.1	0.4	0.5	1.61	1.53	0.44	0.41	0.6	0.3	96.3	100.5	22.3	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.1-3.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/12/81

CORRECTION DATA

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
43	-	99.1	107.4	94.2	-0.10	-0.11	-	0.02	-	6.3	137.0	138.2	90.7	91.4
44	102.4	98.8	106.9	93.2	-0.29	-0.33	0.09	0.09	6.5	6.7	156.4	161.3	88.6	91.4
Avs.	102.4	99.0	107.1	93.7	-0.19	-0.22	0.09	0.05	6.5	6.5	146.7	149.7	89.6	91.4
Std Dv	-	0.3	0.4	0.7	0.13	0.16	-	0.05	-	0.3	13.7	16.4	1.4	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
41	97.1	93.9	99.1	86.1	0.11	0.10	-0.05	-0.05	6.9	6.9	260.7	256.4	216.9	213.4
42	97.2	93.7	99.1	85.6	0.09	0.07	-0.04	-0.04	6.8	6.7	282.0	278.2	216.2	213.4
Avs.	97.2	93.8	99.1	85.9	0.10	0.08	-0.04	-0.04	6.8	6.8	271.3	267.3	216.6	213.4
Std Dv	0.1	0.1	0.0	0.3	0.01	0.02	0.01	0.01	0.1	0.2	15.1	15.4	0.4	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
1	95.0	91.7	96.3	83.2	-0.32	-0.33	-0.01	-0.01	7.2	7.4	456.6	455.9	305.3	304.8
2	95.5	91.8	95.4	81.8	0.31	0.30	-0.18	-0.18	7.9	7.9	321.9	305.4	321.3	304.8
3	95.2	91.6	95.7	81.9	-0.25	-0.32	-0.01	-0.01	7.4	7.5	409.3	408.4	305.5	304.8
4	95.9	92.8	96.6	84.4	-0.14	-0.15	-0.03	-0.03	7.3	7.0	310.8	307.6	307.9	304.8
5	95.1	92.3	96.0	83.4	-0.41	-0.30	-0.03	-0.03	7.3	7.3	429.0	424.4	308.1	304.8
6												NO TRACKING DATA		
39	95.7	92.5	96.0	83.0	0.15	0.12	-0.07	-0.07	7.5	7.8	527.8	517.3	311.0	304.8
40	95.1	92.0	96.0	82.5	-0.09	-0.08	0.00	0.00	7.4	7.6	544.4	543.6	305.2	304.8
47	95.6	92.2	96.4	83.2	1.01	0.96	-0.30	-0.30	7.1	6.9	551.9	500.5	336.1	304.8
48	94.7	91.7	95.7	82.8	-0.18	-0.15	0.01	0.01	7.4	7.2	393.7	395.5	303.4	304.8
Avs.	95.3	92.1	96.0	82.9	0.01	0.01	-0.07	-0.07	7.4	7.4	438.4	428.7	311.5	304.8
Std Dv	0.4	0.4	0.4	0.8	0.47	0.44	0.11	0.11	0.2	0.3	96.5	91.3	11.4	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
37	-	90.0	93.1	79.6	-0.14	-0.13	-	-0.01	-	8.2	1011.0	1009.1	458.1	457.2
38	-	93.7	97.1	84.0	0.10	0.10	-	-0.06	-	7.2	768.2	754.2	465.7	457.2
45												NO TRACKING DATA		
46												NO TRACKING DATA		
Avs.	-	91.9	95.1	81.8	-0.02	-0.01	-	-0.03	-	7.7	889.6	881.7	461.9	457.2
Std Dv	-	2.6	2.8	3.1	0.17	0.16	-	0.04	-	0.7	121.4	127.5	5.4	0.0

TABLE NO. B.1-1.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/14/81

CORRECTION DATA

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
16	96.6	92.4	98.0	83.5	0.49	0.46	-0.19	-0.19	7.4	7.4	123.3	116.3	116.1	109.5
17	99.1	94.5	102.0	86.9	-0.25	-0.24	0.06	0.06	6.9	6.9	115.4	117.7	107.4	109.5
18	100.0	95.1	103.4	87.7	-0.01	-0.01	-0.01	-0.01	6.5	6.8	110.7	110.2	110.0	109.5
19	100.5	95.7	104.2	88.6	0.37	0.36	-0.12	-0.13	6.4	6.7	120.2	114.9	114.5	109.5
20	101.1	96.4	105.3	89.6	0.45	0.44	-0.14	-0.15	6.1	6.7	121.4	115.1	115.5	109.5
21	100.7	95.9	104.3	89.2	0.10	0.10	-0.04	-0.04	6.4	6.6	120.2	118.4	111.2	109.5
22	100.6	95.9	104.9	89.3	0.37	0.37	-0.12	-0.13	6.1	6.6	119.6	114.4	114.5	109.5
23	99.4	95.0	103.2	88.8	0.00	-0.01	0.00	0.00	6.3	5.9	114.6	114.4	109.6	109.5
24	99.2	94.6	103.4	88.0	0.18	0.17	-0.06	-0.06	6.0	6.7	118.2	115.8	111.9	109.5
Avg.	99.7	95.1	103.2	88.0	0.19	0.18	-0.07	-0.07	6.5	6.7	118.2	115.3	112.3	109.5
Std Dv	1.4	1.3	2.4	2.0	0.27	0.26	0.09	0.09	0.5	0.4	4.2	2.5	3.2	0.0
TAKEOFF														
8	91.0	86.1	93.1	78.5	1.12	1.06	-0.39	-0.38	7.2	6.9	147.6	130.2	147.5	130.0
9	90.8	86.3	92.2	78.1	2.12	1.96	-0.65	-0.62	6.9	6.5	162.6	130.9	161.5	130.0
10	90.4	85.9	92.0	76.9	2.54	2.34	-0.75	-0.78	6.8	7.1	170.5	132.2	167.7	130.0
11	90.4	86.1	91.6	77.1	3.29	3.11	-1.02	-1.02	7.0	7.0	191.7	137.0	181.9	130.0
12	90.1	85.8	91.8	76.6	2.32	2.11	-0.67	-0.67	6.7	6.6	169.1	134.1	163.9	130.0
13											NO TRACKING DATA			
14	92.8	88.2	94.3	78.5	2.86	2.72	-0.85	-0.93	6.7	7.4	179.4	134.1	174.0	130.0
15	-	87.9	94.2	78.2	2.72	2.58	-	-0.90	-	7.5	177.0	134.1	171.6	130.0
Avg.	90.9	86.6	92.7	77.7	2.42	2.27	-0.72	-0.76	6.9	7.0	171.1	133.2	166.9	130.0
Std Dv	1.1	1.1	1.3	0.9	0.75	0.72	0.24	0.24	0.2	0.4	15.2	2.5	12.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 100 KTS														
52	90.4	86.8	92.8	79.7	-0.49	-0.47	0.12	0.12	6.7	6.6	159.8	166.4	136.7	142.3
Avg.	90.4	86.8	92.8	79.7	-0.49	-0.47	0.12	0.12	6.7	6.6	159.8	166.4	136.7	142.3
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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TABLE NO. B.1-2.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
27	93.3	89.3	95.2	81.4	-0.02	-0.03	-0.01	-0.01	6.7	6.6	151.4	150.8	142.9	142.3
30	92.9	88.9	95.5	81.6	0.43	0.38	-0.14	-0.14	7.0	7.1	168.5	161.0	149.0	142.3
33	93.8	90.0	95.4	81.7	-0.21	-0.23	0.05	0.05	7.3	7.1	225.0	228.8	139.9	142.3
36	92.8	88.8	95.1	82.0	0.23	0.20	-0.08	-0.07	6.9	6.5	153.1	149.3	146.0	142.3
Avs.	93.2	89.2	95.3	81.7	0.11	0.08	-0.04	-0.04	7.0	6.8	174.5	172.5	144.5	142.3
Std Dv	0.6	0.7	0.2	0.3	0.34	0.33	0.10	0.10	0.3	0.4	42.3	46.5	4.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 132 KTS														
26	94.4	90.4	97.3	83.2	0.15	0.13	-0.06	-0.07	6.9	7.3	241.7	236.8	145.3	142.3
29	94.6	90.9	97.7	83.9	-0.12	-0.13	0.02	0.02	6.6	7.0	233.5	235.1	141.4	142.3
32	94.4	90.8	97.6	84.0	-0.54	-0.50	0.13	0.13	6.5	6.5	163.1	170.5	136.1	142.3
35	94.3	90.6	96.7	83.1	-0.08	-0.08	0.01	0.01	6.9	6.9	178.7	179.0	142.0	142.3
Avs.	94.4	90.7	97.3	83.6	-0.15	-0.14	0.02	0.02	6.7	6.9	204.3	205.4	141.2	142.3
Std Dv	0.2	0.3	0.5	0.6	0.35	0.32	0.10	0.10	0.2	0.4	48.0	43.5	4.6	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
25	96.7	92.8	99.1	85.6	1.28	1.18	-0.42	-0.41	7.5	7.3	167.1	146.9	161.9	142.3
28	96.4	92.3	99.3	85.6	0.77	0.70	-0.23	-0.21	6.6	6.3	199.7	184.7	153.9	142.3
31	96.9	93.4	100.0	86.4	-0.24	-0.24	0.06	0.06	6.8	6.9	234.0	238.5	139.6	142.3
34	96.9	93.1	100.1	86.2	0.25	0.23	-0.08	-0.08	6.6	6.7	252.3	245.0	146.5	142.3
Avs.	96.7	92.9	99.6	85.9	0.51	0.47	-0.17	-0.16	6.9	6.8	213.3	203.8	150.5	142.3
Std Dv	0.3	0.6	0.6	0.5	0.80	0.75	0.25	0.24	0.5	0.5	46.2	57.1	11.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 165 KTS														
49	97.3	93.2	100.3	86.7	-0.58	-0.58	0.16	0.15	6.8	6.3	198.6	209.8	134.8	142.3
50	97.2	93.2	99.7	86.3	-1.89	-1.74	0.49	0.47	6.6	6.3	171.6	203.8	119.9	142.3
51	97.0	92.6	99.8	86.4	0.59	0.55	-0.19	-0.17	7.0	6.4	230.5	216.8	151.4	142.3
Avs.	97.2	93.0	99.9	86.5	-0.63	-0.59	0.15	0.15	6.8	6.3	200.3	210.1	135.3	142.3
Std Dv	0.3	0.5	0.4	0.3	1.75	1.62	0.48	0.45	0.3	0.1	41.7	9.2	22.3	0.0

TABLE NO. B.1-3.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 22,1980

EV	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
44	99.4	95.8	104.0	90.0	-0.34	-0.34	0.09	0.10	6.1	6.8	150.2	155.4	78.7	81.4
Avs.	99.4	95.8	104.0	90.0	-0.34	-0.34	0.09	0.10	6.1	6.8	150.2	155.4	78.7	81.4
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
41	93.5	90.1	95.7	81.9	0.14	0.11	-0.05	-0.05	6.8	7.2	278.0	273.3	206.8	203.3
42	94.2	90.5	95.7	82.4	0.12	0.09	-0.04	-0.04	7.1	6.7	210.6	207.6	206.2	203.3
Avs.	93.8	90.3	95.7	82.2	0.13	0.10	-0.04	-0.04	7.0	7.0	244.3	240.4	206.5	203.3
Std Dv	0.5	0.3	0.0	0.4	0.01	0.01	0.01	0.01	0.2	0.4	47.7	46.4	0.4	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
1	88.0	85.5	88.9	76.6	-0.39	-0.42	-0.01	-0.01	7.7	7.7	530.6	529.6	295.3	294.7
2	87.9	84.9	88.3	74.8	0.35	0.22	-0.18	-0.19	7.7	8.0	419.3	396.9	311.4	294.7
3	88.0	85.2	88.6	76.0	-0.43	-0.38	-0.01	-0.01	7.3	7.4	370.9	370.1	295.4	294.7
4	88.5	86.2	89.6	77.7	-0.18	-0.18	-0.03	-0.03	7.3	6.9	298.0	294.8	298.0	294.7
5	88.2	85.9	89.9	77.4	-0.40	-0.33	-0.04	-0.04	7.1	7.2	387.8	383.4	298.1	294.7
6											NO TRACKING DATA			
39	-	88.4	92.3	78.6	0.14	0.13	-	-0.07	-	7.5	559.1	547.6	301.0	294.7
40	91.3	88.1	91.9	78.3	-0.05	-0.06	0.00	0.00	7.7	7.8	419.6	419.0	295.2	294.7
47	92.4	89.0	93.4	79.6	1.03	0.98	-0.30	-0.31	6.9	7.0	443.0	400.3	326.2	294.7
48	91.7	88.3	92.4	79.1	-0.12	-0.14	0.01	0.01	7.2	7.1	384.6	386.4	293.4	294.7
Avs.	89.5	86.8	90.6	77.6	-0.01	-0.02	-0.07	-0.07	7.4	7.4	423.7	414.2	301.5	294.7
Std Dv	2.1	1.7	2.0	1.7	0.50	0.46	0.12	0.12	0.3	0.4	85.8	84.1	11.4	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
37	-	85.6	88.5	75.5	-0.07	-0.08	-	-0.01	-	8.0	593.2	592.1	448.0	447.1
38	88.6	85.6	89.4	75.8	0.09	0.09	-0.06	-0.06	7.0	7.3	805.5	790.5	455.6	447.1
45											NO TRACKING DATA			
46											NO TRACKING DATA			
Avs.	88.6	85.6	88.9	75.7	0.01	0.00	-0.06	-0.03	7.0	7.7	699.4	691.3	451.8	447.1
Std Dv	-	0.1	0.6	0.2	0.11	0.12	-	0.04	-	0.5	150.1	140.3	5.4	0.0

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TABLE NO. D.1-1.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 2 CENTERLINE - 150 M. WEST JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
16	98.0	93.1	100.3	85.3	0.44	0.42	-0.17	-0.17	7.2	7.3	117.9	111.8	108.1	102.6
17	99.2	94.5	101.8	86.6	0.09	0.09	-0.05	-0.05	7.0	7.3	113.4	111.6	104.2	102.6
18	100.3	95.4	103.9	88.3	-0.03	-0.02	-0.01	-0.01	6.4	6.7	110.8	110.5	102.8	102.6
19	100.5	95.7	104.2	88.7	0.25	0.25	-0.09	-0.09	6.3	6.7	109.9	106.5	105.9	102.6
20	101.0	96.3	105.0	89.5	0.47	0.46	-0.15	-0.16	6.3	6.7	118.3	112.0	108.4	102.6
21	100.8	95.9	104.9	89.6	0.02	0.03	-0.02	-0.02	5.8	6.4	108.3	107.6	103.3	102.6
22	100.5	95.8	104.8	89.3	0.23	0.23	-0.07	-0.08	5.9	6.5	112.6	109.3	105.6	102.6
23	100.5	95.9	104.6	89.6	0.17	0.16	-0.05	-0.05	6.1	6.4	117.2	114.9	104.6	102.6
24	100.6	96.0	104.4	89.3	0.01	0.00	-0.01	-0.01	6.4	6.6	111.6	111.4	102.8	102.6
Avg.	100.2	95.4	103.8	88.5	0.18	0.18	-0.07	-0.07	6.4	6.7	113.3	110.6	105.1	102.6
Std Dv	1.0	1.1	1.7	1.6	0.19	0.19	0.06	0.06	0.5	0.4	3.9	2.7	2.2	0.0
TAKEOFF														
8	-	84.4	91.1	76.8	1.22	1.12	-	-0.42	-	7.2	203.2	178.0	199.4	174.6
9	-	83.6	91.6	76.2	2.04	1.94	-	-0.42	-	7.2	215.5	176.6	213.1	174.6
10	89.3	85.2	91.2	75.7	2.29	2.17	-0.70	-0.74	6.7	7.1	223.3	176.0	221.5	174.6
11	90.0	85.8	91.3	75.7	2.87	2.74	-0.83	-0.94	6.5	7.3	239.5	178.1	234.9	174.6
12	89.5	85.2	91.3	75.5	2.08	1.98	-0.63	-0.72	6.6	7.6	219.7	176.6	217.3	174.6
13											NO TRACKING DATA			
14	89.4	85.0	91.1	74.9	2.61	2.49	-0.78	-0.90	6.7	7.7	231.7	177.2	228.4	174.6
15	89.1	84.8	90.6	75.1	2.43	2.31	-0.75	-0.83	6.9	7.6	225.8	175.7	224.4	174.6
Avg.	89.5	84.9	91.2	75.7	2.22	2.11	-0.74	-0.74	6.7	7.4	222.7	176.9	219.9	174.6
Std Dv	0.4	0.8	0.3	0.7	0.58	0.57	0.09	0.20	0.2	0.3	12.8	1.0	12.6	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 100 KTS														
52	92.1	88.0	95.5	81.3	-0.29	-0.28	0.07	0.07	6.4	6.4	153.8	157.5	147.6	151.2
Avg.	92.1	88.0	95.5	81.3	-0.29	-0.28	0.07	0.07	6.4	6.4	153.8	157.5	147.6	151.2
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.1-2.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 2   CENTERLINE - 150 M. WEST   JUNE 22,1980

EV	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
27	93.9	90.0	95.3	81.5	-0.03	-0.04	-0.01	-0.01	7.5	7.5	241.8	241.1	151.6	151.2
30	93.6	89.9	97.2	82.4	0.44	0.39	-0.13	-0.14	6.2	6.8	211.5	201.9	150.4	151.2
33	95.1	91.4	98.3	84.1	-0.18	-0.18	0.04	0.04	6.5	6.8	249.2	252.7	149.1	151.2
36	92.9	89.1	95.2	82.2	0.04	0.03	-0.02	-0.02	7.2	6.6	159.0	157.7	152.4	151.2
Avg.	93.9	90.1	96.5	82.6	0.07	0.05	-0.03	-0.03	6.8	6.9	215.4	213.4	152.9	151.2
Std Dv	1.1	1.2	1.9	1.4	0.32	0.30	0.09	0.09	0.7	0.5	50.2	52.7	4.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 132 KTS														
26	94.0	90.4	97.4	83.9	0.32	0.27	-0.10	-0.10	6.7	6.7	194.0	187.4	156.6	151.2
29	94.7	91.3	97.0	84.0	0.00	0.00	-0.02	-0.02	7.4	7.0	161.7	160.6	152.2	151.2
32	94.8	91.3	98.6	84.7	-0.46	-0.48	0.11	0.12	6.4	6.9	234.4	243.8	145.3	151.2
35	94.7	91.0	96.5	82.8	-0.05	-0.08	0.01	0.01	7.5	7.6	195.0	195.5	150.8	151.2
Avg.	94.6	91.0	97.4	83.9	-0.05	-0.07	0.00	0.00	7.0	7.1	196.3	196.8	151.2	151.2
Std Dv	0.5	0.5	1.1	1.0	0.39	0.38	0.11	0.11	0.7	0.5	36.4	42.5	5.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
25	96.9	93.4	99.5	86.0	1.00	0.93	-0.32	-0.33	7.1	7.4	302.1	272.5	167.6	151.2
28	95.9	92.5	100.1	86.4	0.85	0.78	-0.23	-0.25	6.1	6.7	227.4	208.5	164.9	151.2
31	97.7	94.4	100.7	87.1	-0.30	-0.29	0.07	0.07	6.8	7.1	314.7	322.0	147.8	151.2
34	96.7	93.1	98.6	84.9	0.29	0.26	-0.10	-0.10	7.3	7.5	255.2	247.2	156.1	151.2
Avg.	96.8	93.4	99.7	86.1	0.46	0.42	-0.14	-0.15	6.8	7.2	274.8	262.5	159.1	151.2
Std Dv	0.9	1.0	1.1	1.1	0.72	0.68	0.21	0.22	0.6	0.4	49.9	58.3	11.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 165 KTS														
49	96.9	92.9	100.3	86.3	-0.67	-0.67	0.18	0.19	6.4	6.6	143.6	153.5	141.6	151.2
50	96.1	92.5	100.4	87.2	-1.74	-1.64	0.41	0.39	5.7	5.4	137.9	162.4	128.3	151.2
51	96.8	92.6	100.2	86.1	0.43	0.31	-0.10	-0.10	6.4	6.5	518.8	500.4	156.7	151.2
Avg.	96.6	92.7	100.3	86.5	-0.66	-0.67	0.16	0.16	6.2	6.2	266.8	272.1	142.2	151.2
Std Dv	0.6	0.3	0.1	0.9	1.53	1.38	0.36	0.35	0.6	0.7	308.7	279.8	20.1	0.0

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BEST DOCUMENT AVAILABLE

TABLE NO. B.1-3.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 2 CENTERLINE - 150 M. WEST JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
43	99.4	95.7	103.8	90.0	-0.03	-0.03	0.00	0.00	6.2	6.3	92.0	92.2	90.1	90.2
44	99.9	96.3	104.5	91.1	-0.21	-0.22	0.06	0.06	6.3	6.1	90.2	92.1	88.3	90.2
Avg.	99.7	96.0	104.2	90.6	-0.12	-0.12	0.03	0.03	6.3	6.2	91.1	92.1	89.2	90.2
Std Dv	0.4	0.4	0.5	0.8	0.13	0.13	0.04	0.04	0.1	0.2	1.3	0.0	1.3	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
41	94.5	91.2	96.2	83.1	0.12	0.10	-0.05	-0.05	7.3	7.5	354.2	348.5	215.6	212.1
42	94.7	91.4	97.6	84.2	0.15	0.11	-0.05	-0.05	6.7	6.8	218.9	215.3	215.7	212.1
Avg.	94.6	91.3	96.9	83.6	0.13	0.11	-0.05	-0.05	7.0	7.1	286.5	281.9	215.6	212.1
Std Dv	0.2	0.1	1.0	0.8	0.02	0.01	0.00	0.00	0.4	0.5	95.7	94.2	0.1	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
1	92.5	89.7	94.3	81.5	-0.20	-0.18	-0.04	-0.04	7.0	7.1	479.0	473.0	307.4	303.6
2	92.7	89.5	93.2	79.6	0.20	0.19	-0.16	-0.16	7.7	7.8	574.6	548.0	318.3	303.6
3	92.2	89.1	92.5	79.5	-0.15	-0.19	-0.04	-0.04	7.4	7.5	403.1	398.2	307.4	303.6
4	93.4	90.6	94.6	82.1	-0.10	-0.09	-0.04	-0.04	6.9	6.6	307.7	303.6	307.6	303.6
5	92.5	89.8	93.5	81.1	-0.19	-0.19	-0.05	-0.05	7.0	7.1	490.4	481.9	308.9	303.6
6											NO TRACKING DATA			
39	92.2	89.4	91.9	79.0	0.22	0.18	-0.09	-0.09	7.9	8.0	314.5	306.8	311.2	303.6
40	92.4	89.4	93.1	80.3	-0.02	-0.04	-0.01	-0.01	7.4	7.5	310.3	309.2	304.6	303.6
47	92.3	89.1	92.4	79.2	0.89	0.81	-0.29	-0.29	7.8	7.9	330.9	303.8	330.7	303.6
48	-	88.1	92.4	79.4	0.00	-0.02	-	-0.02	-	7.9	322.1	320.1	305.4	303.6
Avg.	92.5	89.4	93.1	80.2	0.07	0.05	-0.09	-0.08	7.4	7.5	392.5	382.7	311.3	303.6
Std Dv	0.4	0.7	1.0	1.2	0.37	0.34	0.10	0.10	0.4	0.5	106.3	102.2	8.9	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
37	90.2	87.3	89.2	76.6	-0.10	-0.10	-0.01	-0.01	7.5	7.8	665.5	664.0	457.0	456.0
38	-	86.0	89.8	77.4	0.05	0.05	-	-0.05	-	7.8	927.2	912.3	463.4	456.0
45											NO TRACKING DATA			
46											NO TRACKING DATA			
Avg.	90.2	86.7	89.5	77.0	-0.03	-0.03	-0.01	-0.03	7.5	7.8	796.4	788.2	460.2	456.0
Std Dv	-	0.9	0.5	0.6	0.11	0.11	-	0.03	-	0.0	185.1	175.5	4.6	0.0

TABLE NO. B.1-1.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/14/81

CORRECTION DATA

SITE: 3 CENTERLINE - 150 M. EAST JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		TRACKING DATA (METERS) (REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
16	97.1	92.7	98.8	84.2	0.33	0.32	-0.14	-0.14	7.4	7.5	165.6	158.6	139.8	133.9
17	98.1	93.3	101.0	85.6	-0.12	-0.11	0.02	0.02	6.5	6.9	148.7	149.6	133.1	133.9
18	97.8	93.0	100.2	85.5	0.02	0.03	-0.03	-0.02	7.0	6.7	140.7	139.6	135.0	133.9
19	98.1	93.4	100.9	85.9	0.29	0.28	-0.11	-0.11	6.7	6.8	141.3	136.3	138.9	133.9
20	98.4	93.6	101.6	85.9	0.34	0.33	-0.11	-0.12	6.3	6.9	150.7	144.6	139.6	133.9
21	98.1	93.4	101.1	85.9	0.18	0.18	-0.07	-0.07	6.4	6.8	139.5	136.1	137.2	133.9
22	98.3	93.7	101.4	86.5	0.42	0.41	-0.14	-0.14	6.6	6.6	151.0	143.7	140.7	133.9
23	98.1	93.9	101.0	86.4	0.14	0.13	-0.05	-0.05	6.6	6.5	141.1	138.7	136.2	133.9
24	97.3	92.8	101.1	86.3	0.06	0.05	-0.02	-0.02	5.9	6.1	172.7	171.2	135.0	133.9
Avg.	97.9	93.3	100.8	85.8	0.18	0.18	-0.07	-0.07	6.6	6.8	150.1	146.5	137.3	133.9
Std Dv	0.5	0.4	0.9	0.7	0.19	0.18	0.06	0.06	0.4	0.4	12.6	12.5	2.8	0.0
TAKEOFF														
8	92.4	87.6	95.5	81.1	0.32	0.32	-0.15	-0.14	7.0	6.9	119.3	113.6	107.7	102.6
9	92.9	88.2	94.8	80.8	1.75	1.66	-0.57	-0.52	6.9	6.4	124.8	103.4	123.8	102.6
10	92.3	87.6	94.4	80.3	2.05	1.94	-0.64	-0.59	6.8	6.3	127.6	102.7	127.4	102.6
11	92.6	88.0	94.6	79.4	2.92	2.81	-0.91	-0.96	6.8	7.2	145.4	107.1	139.2	102.6
12	92.4	87.7	94.8	80.2	1.92	1.82	-0.58	-0.57	6.6	6.5	126.3	103.2	125.6	102.6
13											NO TRACKING DATA			
14	92.9	88.2	95.0	79.9	2.38	2.30	-0.78	-0.78	7.1	7.2	135.7	105.6	131.8	102.6
15	92.8	88.1	95.0	80.2	2.30	2.22	-0.74	-0.74	7.0	7.0	132.5	104.0	130.7	102.6
Avg.	92.6	87.9	94.9	80.3	1.95	1.87	-0.62	-0.61	6.9	6.8	130.2	105.7	126.6	102.6
Std Dv	0.3	0.3	0.4	0.6	0.89	0.85	0.26	0.28	0.2	0.4	9.4	4.2	10.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 100 KTS														
52	91.2	87.5	93.9	80.2	-0.63	-0.59	0.14	0.14	6.8	6.8	213.6	224.3	143.9	151.2
Avg.	91.2	87.5	93.9	80.2	-0.63	-0.59	0.14	0.14	6.8	6.8	213.6	224.3	143.9	151.2
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.1-2.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/14/81

CORRECTION DATA

SITE: 3 CENTERLINE - 150 M. EAST JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
27	91.7	88.0	93.6	80.6	0.02	0.01	-0.02	-0.02	6.9	6.4	164.5	163.2	152.4	151.2
30	92.1	88.3	95.0	81.0	0.38	0.33	-0.12	-0.12	6.6	6.7	220.8	211.9	157.5	151.2
33	92.6	88.8	94.2	81.0	-0.51	-0.47	0.13	0.13	6.9	6.8	148.7	155.2	144.8	151.2
36	91.9	88.1	93.9	80.8	0.19	0.15	-0.07	-0.06	7.4	6.8	241.9	236.8	154.4	151.2
Avs.	92.0	88.3	94.2	80.8	0.02	0.00	-0.02	-0.02	6.9	6.7	194.0	191.8	152.3	151.2
Std Dv	0.4	0.4	0.7	0.3	0.47	0.42	0.13	0.13	0.4	0.3	54.5	47.9	6.6	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 132 KTS														
26	93.2	90.0	96.6	83.3	0.02	-0.01	-0.02	-0.02	6.3	7.1	211.1	209.6	152.2	151.2
29	93.8	90.4	95.6	82.5	-0.19	-0.21	0.05	0.05	7.7	7.5	224.8	228.0	149.1	151.2
32	93.3	90.0	96.6	83.5	-0.38	-0.40	0.09	0.09	6.4	6.6	221.1	228.5	146.3	151.2
35	93.2	89.6	95.0	82.1	-0.04	-0.04	0.00	0.00	7.7	7.1	162.8	162.6	151.4	151.2
Avs.	93.4	90.0	95.9	82.8	-0.15	-0.16	0.03	0.03	7.0	7.1	205.0	207.2	149.7	151.2
Std Dv	0.3	0.4	0.9	0.8	0.22	0.22	0.06	0.06	0.9	0.5	35.2	37.9	3.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
25	95.5	91.9	97.3	84.3	1.21	1.13	-0.41	-0.39	7.5	7.1	178.7	157.7	171.2	151.2
28	95.2	91.5	97.8	84.2	0.53	0.48	-0.18	-0.17	7.2	7.0	216.1	204.3	159.9	151.2
31	95.9	92.7	98.1	85.1	-0.15	-0.16	0.03	0.03	7.3	7.3	280.5	283.1	149.8	151.2
34	96.2	92.9	98.7	85.9	-0.12	-0.13	0.02	0.02	7.1	6.9	307.2	309.0	150.3	151.2
Avs.	95.7	92.3	98.0	84.9	0.37	0.33	-0.13	-0.13	7.3	7.1	245.6	238.5	157.8	151.2
Std Dv	0.5	0.8	0.7	1.0	0.79	0.75	0.25	0.24	0.2	0.2	72.0	85.6	12.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 165 KTS														
49	97.0	93.0	98.5	85.0	-0.36	-0.37	0.11	0.10	7.6	7.1	196.6	203.2	146.2	151.2
50	96.1	92.4	98.6	85.8	-2.02	-1.85	0.53	0.48	6.9	6.2	198.5	236.9	126.6	151.2
51	96.5	92.2	98.4	84.7	0.74	0.69	-0.23	-0.23	7.1	7.0	267.5	248.2	162.9	151.2
Avs.	96.6	92.5	98.5	85.2	-0.55	-0.51	0.14	0.12	7.2	6.8	220.9	229.5	145.3	151.2
Std Dv	0.7	0.6	0.2	0.8	1.96	1.80	0.54	0.50	0.5	0.6	57.1	33.1	25.7	0.0

TABLE NO. B.1-3.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 3 CENTERLINE - 150 M. EAST JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
43	98.8	95.0	102.7	89.2	0.10	0.05	-0.04	-0.04	6.4	6.6	491.1	484.9	91.4	90.2
44	99.0	95.3	103.0	89.6	-0.43	-0.42	0.11	0.12	6.5	6.8	256.5	266.9	86.7	90.2
Avs.	98.9	95.1	102.8	89.4	-0.16	-0.19	0.03	0.04	6.4	6.7	373.8	375.9	89.0	90.2
Std Dv	0.1	0.2	0.2	0.3	0.37	0.33	0.11	0.11	0.0	0.1	165.9	154.1	3.3	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
41	93.3	90.2	95.1	82.4	-0.08	-0.02	-0.06	-0.06	6.8	6.5	217.0	212.8	216.3	212.1
42	94.2	90.7	95.5	82.1	0.01	0.00	-0.02	-0.02	6.9	7.6	450.7	447.6	213.6	212.1
Avs.	93.8	90.4	95.3	82.3	-0.03	-0.01	-0.04	-0.04	6.9	7.1	333.8	330.2	215.0	212.1
Std Dv	0.6	0.4	0.2	0.2	0.06	0.01	0.03	0.03	0.1	0.8	165.3	166.0	1.9	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
1	90.5	87.7	91.8	79.0	-0.43	-0.41	0.03	0.03	7.2	7.3	469.5	473.6	301.0	303.6
2	90.9	87.7	90.5	77.1	0.32	0.30	-0.19	-0.20	7.9	8.0	487.7	461.0	321.1	303.6
3	91.1	88.1	91.3	77.9	-0.54	-0.45	0.04	0.04	7.5	7.9	614.0	620.6	300.3	303.6
4	91.5	88.7	91.9	79.7	-0.23	-0.23	-0.01	-0.01	7.2	7.2	306.7	306.2	304.1	303.6
5	91.1	88.4	91.5	79.5	-0.31	-0.31	-0.02	-0.02	7.5	7.4	477.5	474.7	305.4	303.6
6												NO TRACKING DATA		
39	91.9	89.1	91.0	78.4	0.11	0.10	-0.06	-0.06	7.8	7.7	642.8	630.7	309.4	303.6
40	91.8	88.8	92.1	79.7	-0.13	-0.12	0.01	0.01	7.2	6.9	473.9	476.1	302.2	303.6
47	91.9	89.0	93.2	80.4	1.19	1.11	-0.35	-0.34	7.1	6.9	588.3	524.8	340.3	303.6
48	91.1	88.2	91.7	79.0	-0.41	-0.39	0.08	0.08	7.5	7.4	591.0	605.9	296.1	303.6
Avs.	91.3	88.4	91.7	79.0	-0.05	-0.04	-0.05	-0.05	7.4	7.4	516.8	508.2	308.9	303.6
Std Dv	0.5	0.6	0.8	1.1	0.58	0.53	0.14	0.14	0.3	0.4	111.2	109.5	14.7	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS														
37	-	85.6	87.2	75.1	-0.09	-0.09	-	-0.02	-	7.5	924.1	919.3	458.4	456.0
38	-	85.6	87.4	74.8	0.06	0.06	-	-0.06	-	8.1	1064.7	1046.7	463.8	456.0
45												NO TRACKING DATA		
46												NO TRACKING DATA		
Avs.	-	85.6	87.3	75.0	-0.01	-0.01	-	-0.04	-	7.8	994.4	983.0	461.1	456.0
Std Dv	-	0.0	0.2	0.2	0.11	0.11	-	0.03	-	0.4	70.3	63.7	3.8	0.0

TABLE NO. B.1-1.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/14/81

CORRECTION DATA

SITE: 4 SIDELINE - 164 M. NORTH JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
17	98.4	94.7	100.6	86.9	-0.43	-0.38	0.10	0.10	7.1	7.2	218.8	225.9	184.9	191.0
18	99.0	94.9	100.9	86.8	-0.19	-0.16	0.03	0.03	7.1	7.1	196.9	198.8	189.2	191.0
19	99.6	95.6	101.0	86.8	-0.01	0.01	-0.03	-0.03	7.6	7.7	203.5	201.7	192.7	191.0
20	99.0	95.4	100.5	87.0	-0.42	-0.38	0.11	0.11	7.4	7.4	196.2	203.0	184.6	191.0
21	98.7	94.8	100.8	86.9	-0.27	-0.24	0.06	0.06	7.1	7.2	201.6	205.5	187.4	191.0
22	98.7	95.0	100.3	86.9	-0.56	-0.51	0.16	0.15	7.4	7.2	192.0	201.7	181.8	191.0
23	98.0	94.4	100.1	87.4	0.23	0.24	-0.11	-0.10	7.4	6.6	217.3	209.8	197.8	191.0
24	96.8	93.4	97.9	84.0	-0.73	-0.69	0.22	0.22	7.2	7.3	183.4	196.8	177.9	191.0
Avs.	98.5	94.8	100.3	86.6	-0.30	-0.26	0.07	0.07	7.3	7.2	201.2	205.4	187.0	191.0
Std Dv	0.9	0.7	1.1	1.1	0.33	0.32	0.11	0.11	0.2	0.3	13.0	9.9	6.7	0.0
TAKEOFF														
8	-	85.6	89.4	76.0	0.09	0.16	-	-0.12	-	7.5	215.5	207.7	211.9	204.2
9	90.0	86.2	89.5	76.1	0.72	0.63	-0.28	-0.27	7.7	7.3	229.2	210.6	222.2	204.2
10	89.6	85.7	89.5	75.8	0.95	0.88	-0.36	-0.36	7.7	7.6	236.2	211.9	227.6	204.2
11	89.5	85.7	89.6	76.3	1.48	1.34	-0.52	-0.50	7.7	7.4	238.7	204.2	238.7	204.2
12	90.4	86.4	90.4	77.0	0.87	0.81	-0.34	-0.32	7.7	7.3	237.2	214.4	225.9	204.2
13											NO TRACKING DATA			
14	90.1	86.3	89.9	76.5	1.29	1.20	-0.48	-0.46	7.8	7.6	235.0	204.2	234.9	204.2
15	90.1	86.2	90.3	77.0	1.27	1.15	-0.45	-0.43	7.7	7.3	241.8	211.2	233.7	204.2
Avs.	89.9	86.0	89.8	76.4	0.95	0.88	-0.40	-0.35	7.7	7.4	233.4	209.2	227.9	204.2
Std Dv	0.4	0.4	0.4	0.5	0.51	0.44	0.10	0.14	0.1	0.2	9.6	4.3	9.9	0.0

TABLE NO. B.1-2.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 4 SIDELINE - 164 M. NORTH JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
27	92.8	89.9	94.6	82.0	-0.19	-0.20	0.04	0.04	6.5	6.3	228.1	231.2	210.1	212.9
30	92.2	89.5	93.8	81.6	-0.27	-0.28	0.04	0.04	7.5	7.1	432.8	438.8	210.0	212.9
33	93.4	90.6	95.5	82.6	0.10	0.08	-0.04	-0.04	6.7	6.9	216.4	213.2	216.1	212.9
36	93.8	91.0	95.4	83.2	0.57	0.52	-0.18	-0.17	7.0	6.6	225.8	213.0	225.8	212.9
Avg.	93.0	90.2	94.8	82.4	0.05	0.03	-0.03	-0.03	6.9	6.7	275.8	274.0	215.5	212.9
Std Dv	0.8	0.8	0.9	0.9	0.47	0.44	0.13	0.12	0.6	0.4	128.4	134.9	9.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 132 KTS														
26	93.4	90.6	95.7	83.6	-0.30	-0.30	0.07	0.07	6.6	6.6	208.1	212.9	208.1	212.9
29	95.6	92.7	97.9	85.4	-0.04	-0.05	-0.01	-0.01	6.6	6.6	214.3	213.8	213.4	212.9
32	93.3	90.5	96.0	82.9	-1.32	-1.26	0.34	0.36	6.3	6.6	189.1	214.2	187.9	212.9
35	94.6	91.7	96.9	84.4	0.06	0.05	-0.03	-0.03	6.7	6.7	216.0	213.7	215.2	212.9
Avg.	94.2	91.4	96.6	84.1	-0.40	-0.39	0.09	0.10	6.5	6.6	206.9	213.7	206.1	212.9
Std Dv	1.3	1.3	1.2	1.3	0.77	0.73	0.21	0.22	0.2	0.1	15.1	0.7	15.3	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
25	97.2	93.8	98.5	85.9	0.15	0.13	-0.07	-0.06	7.4	6.9	224.4	219.7	217.5	212.9
28	97.2	93.6	98.5	85.9	-0.01	-0.02	-0.01	-0.01	7.2	6.3	218.8	217.8	213.9	212.9
31	96.2	92.9	97.2	84.4	-1.03	-0.99	0.30	0.29	7.0	6.8	205.1	225.9	193.3	212.9
34	97.0	93.6	99.0	86.5	0.49	0.44	-0.15	-0.15	6.7	6.6	228.1	216.7	224.2	212.9
Avg.	96.9	93.5	98.3	85.7	-0.10	-0.11	0.02	0.02	7.1	6.7	219.1	220.1	212.2	212.9
Std Dv	0.6	0.5	1.0	1.1	0.80	0.76	0.24	0.23	0.3	0.3	12.4	5.0	16.3	0.0

TABLE NO. B.1-3.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 4 SIDELINE - 164 M. NORTH JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
43	97.4	93.6	99.4	86.9	-0.07	-0.08	0.01	0.01	7.3	6.2	190.5	191.3	174.3	175.0
44	99.2	95.5	102.9	90.2	0.50	0.46	-0.14	-0.14	6.3	6.0	190.7	181.1	184.3	175.0
Avs.	98.3	94.6	101.2	88.5	0.21	0.19	-0.06	-0.06	6.8	6.1	190.6	186.2	179.3	175.0
Std Dv	1.3	1.4	2.5	2.4	0.40	0.38	0.11	0.11	0.7	0.1	0.1	7.3	7.1	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
41	97.9	95.3	99.9	87.9	0.53	0.50	-0.18	-0.16	7.3	6.7	396.4	374.7	274.8	259.8
42	95.4	92.3	96.6	84.9	0.30	0.27	-0.11	-0.09	7.3	6.6	269.2	260.4	268.6	259.8
Avs.	96.7	93.8	98.2	86.4	0.41	0.38	-0.14	-0.12	7.3	6.6	332.8	317.6	271.7	259.8
Std Dv	1.8	2.1	2.4	2.1	0.16	0.16	0.05	0.05	0.0	0.1	90.0	80.9	4.4	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
1	92.4	89.4	92.3	80.2	-0.56	-0.57	0.06	0.06	7.6	7.5	517.3	526.8	332.5	338.6
2	94.7	91.8	94.6	82.6	-0.48	-0.44	0.08	0.07	7.9	7.4	331.8	339.5	330.9	338.6
3	93.0	89.9	92.5	80.9	-0.42	-0.32	-0.02	-0.02	7.7	7.2	344.5	342.8	340.3	338.6
4	95.0	92.5	94.5	83.1	-0.83	-0.78	0.19	0.17	8.1	7.4	321.0	338.6	321.0	338.6
5	92.5	89.5	91.7	79.3	-1.11	-1.14	0.18	0.18	7.7	7.7	641.7	677.6	320.7	338.6
6											NO TRACKING DATA			
39	95.5	92.9	95.5	84.5	0.05	0.05	-0.04	-0.03	7.6	6.7	342.8	339.0	342.4	338.6
40	93.9	90.1	93.3	81.0	-0.03	-0.05	-0.03	-0.03	7.3	7.2	942.1	934.2	341.5	338.6
Avs.	93.9	90.9	93.5	81.7	-0.48	-0.46	0.06	0.06	7.7	7.3	491.6	499.8	332.7	338.6
Std Dv	1.4	1.6	1.5	2.0	0.45	0.45	0.11	0.10	0.3	0.3	254.8	254.3	10.1	0.0
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
37	-	90.2	91.2	80.4	-0.12	-0.10	-	0.00	-	7.2	820.4	820.8	479.8	480.0
38	90.5	87.4	88.6	76.7	-0.11	-0.12	-0.01	-0.01	7.9	7.6	782.4	780.6	481.1	480.0
45											NO TRACKING DATA			
46											NO TRACKING DATA			
Avs.	90.5	88.8	89.9	78.5	-0.12	-0.11	-0.01	-0.00	7.9	7.4	801.4	800.7	480.5	480.0
Std Dv	-	2.0	1.8	2.6	0.01	0.01	-	0.01	-	0.3	26.8	28.4	1.0	0.0

TABLE NO. B.1-1.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/14/81

CORRECTION DATA

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
16	91.9	88.4	93.2	80.2	0.31	0.28	-0.14	-0.13	7.4	7.1	199.9	191.3	199.5	191.0
17	92.3	88.4	94.0	80.6	0.11	0.09	-0.06	-0.05	7.2	6.8	197.4	193.9	194.4	191.0
18	91.9	88.2	92.8	79.5	0.00	-0.02	-0.04	-0.04	7.5	7.2	195.2	192.9	193.3	191.0
19	91.7	87.9	92.3	79.2	0.12	0.10	-0.08	-0.08	7.9	7.4	195.6	191.0	195.6	191.0
20	92.7	88.9	95.0	81.0	0.56	0.52	-0.20	-0.20	6.9	6.9	224.6	209.9	204.3	191.0
21	92.3	88.4	93.4	80.1	0.18	0.17	-0.10	-0.09	7.5	7.1	197.1	191.4	196.6	191.0
22	93.0	89.0	94.7	80.8	0.60	0.59	-0.23	-0.23	7.3	7.1	205.7	191.0	205.6	191.0
23	93.1	89.2	95.6	81.8	0.19	0.16	-0.07	-0.07	6.7	6.5	196.9	192.3	195.6	191.0
24	93.9	89.9	95.5	81.6	0.71	0.65	-0.24	-0.24	7.4	7.4	206.1	191.2	205.8	191.0
Avs.	92.5	88.7	94.1	80.5	0.31	0.28	-0.13	-0.13	7.3	7.0	202.0	193.9	199.0	191.0
Std Dv	0.8	0.7	1.3	0.9	0.27	0.26	0.08	0.08	0.4	0.3	10.0	6.5	5.4	0.0
TAKEOFF														
8	90.1	85.2	91.6	76.0	0.69	0.51	-0.25	-0.26	7.4	7.8	255.1	236.2	220.6	204.2
9	89.1	85.3	89.4	75.0	1.07	1.00	-0.40	-0.39	7.5	7.3	251.4	222.1	231.1	204.2
10	88.9	84.9	89.0	74.7	1.39	1.17	-0.49	-0.47	8.0	7.7	281.2	244.3	235.0	204.2
11	88.8	85.0	88.6	74.2	1.79	1.64	-0.57	-0.59	7.1	7.3	274.9	228.5	245.6	204.2
12	88.8	84.7	89.1	74.8	1.19	1.01	-0.40	-0.41	7.6	7.6	265.3	234.5	231.0	204.2
13											NO TRACKING DATA			
14	89.2	85.0	88.9	74.6	1.41	1.30	-0.52	-0.52	8.0	8.0	258.2	222.2	237.3	204.2
15	89.4	85.0	89.8	75.1	1.39	1.19	-0.45	-0.46	7.4	7.7	266.7	232.1	234.7	204.2
Avs.	89.2	85.0	89.5	74.9	1.28	1.12	-0.44	-0.44	7.6	7.6	264.7	231.4	233.6	204.2
Std Dv	0.5	0.2	1.1	0.6	0.37	0.38	0.11	0.11	0.4	0.3	11.8	8.7	8.3	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 100 KTS														
52	90.8	87.9	93.1	80.9	0.14	0.11	-0.05	-0.05	7.1	6.8	226.2	222.5	216.5	212.9
Avs.	90.8	87.9	93.1	80.9	0.14	0.11	-0.05	-0.05	7.1	6.8	226.2	222.5	216.5	212.9
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.1-2.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
27	93.2	90.5	93.3	81.5	0.12	0.08	-0.06	-0.05	7.6	7.3	219.6	216.0	216.5	212.9
30	93.4	91.0	96.2	84.3	0.52	0.48	-0.16	-0.15	6.8	6.4	232.7	220.1	225.1	212.9
33	93.3	90.7	93.6	81.6	-0.38	-0.39	0.11	0.10	7.6	7.3	215.5	222.5	206.3	212.9
36	91.4	89.1	93.0	81.1	-0.45	-0.44	0.12	0.11	6.7	6.4	212.6	221.2	204.7	212.9
Avs.	92.8	90.3	94.0	82.1	-0.05	-0.07	0.00	0.00	7.2	6.9	220.1	220.0	213.1	212.9
Std Dv	1.2	1.0	1.8	1.8	0.56	0.53	0.17	0.15	0.6	0.7	10.9	3.4	11.7	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 132 KTS														
26	95.4	93.2	97.9	86.2	0.35	0.32	-0.14	-0.13	7.7	7.3	226.7	217.6	221.8	212.9
29	94.3	91.9	95.7	83.8	-0.15	-0.17	0.03	0.03	6.9	6.8	227.5	229.5	211.1	212.9
32	96.0	93.5	98.6	87.0	0.62	0.57	-0.20	-0.19	7.2	6.7	237.4	222.6	227.1	212.9
35	93.7	91.4	94.9	83.4	-0.18	-0.19	0.04	0.04	7.6	6.9	215.6	218.4	210.3	212.9
Avs.	94.9	92.5	96.8	85.1	0.16	0.13	-0.07	-0.06	7.4	6.9	226.8	222.0	217.6	212.9
Std Dv	1.2	1.3	2.1	2.2	0.48	0.46	0.15	0.14	0.4	0.3	10.9	6.7	10.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
25	96.9	94.1	98.0	86.1	1.03	0.96	-0.33	-0.30	7.2	6.6	237.3	213.6	236.6	212.9
28	97.6	94.6	100.2	87.6	0.66	0.62	-0.22	-0.21	7.2	6.9	247.3	230.4	228.5	212.9
31	96.6	93.9	99.0	86.9	0.63	0.57	-0.19	-0.20	6.9	7.2	258.1	242.0	227.1	212.9
34	96.6	94.0	98.5	85.6	-0.33	-0.34	0.08	0.09	7.1	7.4	300.2	308.3	207.4	212.9
Avs.	96.9	94.1	98.9	86.6	0.50	0.45	-0.16	-0.15	7.1	7.0	260.7	248.6	224.9	212.9
Std Dv	0.6	0.4	1.2	1.1	0.71	0.68	0.21	0.21	0.2	0.4	33.9	50.8	15.2	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 165 KTS														
49	96.7	93.5	98.4	86.6	-0.08	-0.10	0.01	0.01	7.0	6.7	213.5	214.5	212.0	212.9
50	97.5	94.2	100.4	88.1	-0.13	-0.14	0.02	0.02	6.9	6.4	230.5	232.5	211.2	212.9
51	96.2	93.1	97.6	85.7	0.46	0.42	-0.15	-0.15	7.0	7.2	223.8	213.3	223.4	212.9
Avs.	96.8	93.6	98.8	86.8	0.08	0.06	-0.04	-0.04	7.0	6.8	222.6	220.1	215.5	212.9
Std Dv	0.9	0.8	2.0	1.7	0.46	0.44	0.13	0.13	0.1	0.6	12.1	15.2	9.7	0.0

TABLE NO. B.1-3.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/14/81

CORRECTION DATA

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
43	97.9	94.8	102.5	89.2	-0.03	-0.04	0.00	0.00	5.7	6.5	175.0	175.0	175.0	175.0
44	96.3	92.9	99.3	86.1	-0.81	-0.80	0.23	0.22	6.9	6.7	220.0	237.5	162.1	175.0
Avs.	97.1	93.8	100.9	87.6	-0.42	-0.42	0.12	0.11	6.3	6.6	197.5	206.2	168.6	175.0
Std Dv	1.1	1.4	2.3	2.2	0.55	0.54	0.16	0.16	0.9	0.2	31.8	44.2	9.1	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
41	93.8	91.2	95.6	83.4	-0.08	-0.10	0.01	0.01	6.9	7.0	267.8	268.5	259.1	259.8
42	96.5	93.6	98.0	86.1	-0.22	-0.21	0.05	0.05	7.5	6.7	256.0	260.2	255.6	259.8
Avs.	95.1	92.4	96.8	84.8	-0.15	-0.15	0.03	0.03	7.2	6.8	261.9	264.4	257.4	259.8
Std Dv	1.9	1.7	1.7	1.9	0.10	0.08	0.03	0.03	0.4	0.2	8.3	5.8	2.5	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
1	94.6	91.6	96.0	83.6	0.12	0.12	-0.11	-0.11	7.2	7.1	357.1	344.6	350.6	338.6
2	91.2	88.4	91.9	78.6	0.78	0.71	-0.33	-0.34	7.4	7.7	536.4	484.8	374.6	338.6
3	94.4	91.8	94.7	83.3	-0.29	-0.28	0.01	0.01	7.6	6.9	343.0	343.5	338.0	338.6
4	91.6	89.0	91.7	79.8	0.33	0.26	-0.20	-0.21	7.4	7.6	539.1	506.1	360.6	338.6
5	94.4	91.5	95.2	82.7	0.42	0.39	-0.22	-0.21	7.6	7.3	363.0	340.2	361.2	338.6
6												NO TRACKING DATA		
39	92.5	90.1	92.3	80.4	0.16	0.13	-0.07	-0.07	7.6	7.5	457.4	447.7	345.9	338.6
40	95.2	92.8	95.9	83.7	-0.16	-0.16	0.02	0.02	7.6	7.5	567.2	570.9	336.4	338.6
47	92.1	89.3	92.6	80.6	1.43	1.27	-0.38	-0.39	7.0	7.2	443.3	391.6	383.3	338.6
48	94.5	91.9	95.0	83.0	0.22	0.20	-0.10	-0.09	7.8	7.2	739.7	719.1	348.3	338.6
Avs.	93.4	90.7	93.9	81.7	0.33	0.29	-0.15	-0.15	7.5	7.3	482.9	460.9	355.5	338.6
Std Dv	1.7	1.6	1.9	2.0	0.55	0.50	0.15	0.15	0.3	0.3	136.8	135.3	17.0	0.0
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
37	89.2	87.2	88.3	76.3	-0.08	-0.10	-0.01	-0.01	7.4	7.8	654.5	652.0	481.8	480.0
38	91.7	89.1	91.9	79.2	0.23	0.20	-0.10	-0.10	7.4	7.5	1108.9	1075.5	494.9	480.0
45												NO TRACKING DATA		
46												NO TRACKING DATA		
Avs.	90.5	88.2	90.1	77.7	0.07	0.05	-0.06	-0.06	7.4	7.6	881.7	863.8	488.4	480.0
Std Dv	1.8	1.4	2.5	2.1	0.22	0.21	0.06	0.06	0.0	0.2	227.2	211.8	9.2	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.1-1.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
16	95.2	92.0	97.3	84.1	0.27	0.28	-0.13	-0.13	6.8	7.1	203.4	194.7	200.3	191.7
17	95.8	92.3	97.9	84.5	0.06	0.04	-0.05	-0.05	6.8	6.8	198.1	194.7	195.1	191.7
18	95.9	92.4	97.6	84.1	-0.07	-0.02	-0.04	-0.04	6.9	6.9	196.0	193.7	194.0	191.7
19	95.8	92.2	97.1	83.6	0.14	0.10	-0.07	-0.08	7.1	7.3	198.1	193.5	196.3	191.7
20	96.5	93.0	98.2	84.9	0.57	0.53	-0.21	-0.21	7.2	7.1	207.0	193.6	205.1	191.7
21	95.9	92.4	98.1	84.5	0.19	0.17	-0.09	-0.09	6.8	6.9	197.8	192.1	197.4	191.7
22	96.4	92.9	98.4	85.3	0.64	0.59	-0.22	-0.21	7.0	6.7	208.4	193.7	206.3	191.7
23	97.2	92.8	100.5	85.8	0.14	0.15	-0.06	-0.07	6.2	6.5	196.3	191.7	196.3	191.7
24	98.0	93.9	100.5	86.1	0.70	0.65	-0.22	-0.23	6.7	7.0	206.8	192.0	206.5	191.7
Avs.	96.3	92.6	98.4	84.8	0.29	0.28	-0.12	-0.12	6.8	6.9	201.3	193.3	199.7	191.7
Std Dv	0.9	0.6	1.3	0.9	0.29	0.27	0.08	0.08	0.3	0.2	5.4	1.2	5.4	0.0
TAKEOFF														
8	96.4	92.0	98.0	83.0	0.63	0.49	-0.25	-0.26	7.4	7.8	222.3	205.9	221.4	205.0
9	92.6	88.2	94.3	78.8	1.13	0.99	-0.38	-0.42	7.1	7.8	252.0	222.7	232.0	205.0
10	92.6	88.2	93.8	78.6	1.32	1.16	-0.45	-0.49	7.4	8.1	271.2	235.6	235.9	205.0
11	92.2	88.0	93.2	78.1	1.88	1.63	-0.60	-0.65	7.5	8.1	275.5	229.1	246.5	205.0
12	92.5	88.2	94.3	78.4	1.12	1.00	-0.37	-0.42	7.0	7.9	265.9	235.0	231.9	205.0
13											NO TRACKING DATA			
14	92.5	88.3	93.4	78.7	1.51	1.29	-0.48	-0.50	7.4	7.7	258.8	222.8	238.2	205.0
15	92.6	88.3	94.3	79.0	1.31	1.18	-0.42	-0.46	6.9	7.7	267.5	232.7	235.7	205.0
Avs.	93.0	88.8	94.5	79.2	1.27	1.11	-0.42	-0.46	7.3	7.9	259.0	226.3	234.5	205.0
Std Dv	1.6	1.6	1.8	1.9	0.42	0.38	0.12	0.13	0.3	0.2	19.7	11.4	8.3	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 100 KTS														
52	95.5	92.6	98.1	85.4	0.11	0.10	-0.05	-0.05	7.1	6.9	227.0	223.4	217.3	213.8
Avs.	95.5	92.6	98.1	85.4	0.11	0.10	-0.05	-0.05	7.1	6.9	227.0	223.4	217.3	213.8
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.1-2.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/14/81

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
27	97.3	94.7	98.4	86.4	0.11	0.08	-0.06	-0.05	7.7	7.3	220.5	216.9	217.4	213.8
30	97.7	95.1	100.8	88.6	0.51	0.47	-0.16	-0.16	6.7	6.6	233.7	221.1	226.0	213.8
33	97.3	95.0	98.5	86.9	-0.38	-0.38	0.10	0.10	7.3	7.0	210.1	216.8	207.1	213.8
36	95.3	93.1	97.1	85.8	-0.45	-0.44	0.13	0.12	7.7	6.8	205.6	213.8	205.6	213.8
Avs.	96.9	94.5	98.7	86.9	-0.05	-0.07	0.00	0.00	7.3	6.9	217.5	217.2	214.0	213.8
Std Dv	1.3	1.2	1.9	1.5	0.55	0.52	0.17	0.16	0.6	0.4	15.3	3.7	11.7	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 132 KTS														
26	99.2	96.7	102.1	90.1	0.34	0.32	-0.13	-0.12	7.4	6.8	227.5	218.5	222.6	213.8
29	98.5	96.4	100.1	88.7	-0.19	-0.17	0.03	0.03	7.4	6.9	217.6	219.4	212.0	213.8
32	99.6	97.1	103.3	91.1	0.60	0.56	-0.19	-0.17	6.7	6.2	230.1	215.8	227.9	213.8
35	98.2	95.9	100.1	88.4	-0.22	-0.19	0.04	0.04	7.2	6.8	216.6	219.3	211.1	213.8
Avs.	98.9	96.5	101.4	89.6	0.13	0.13	-0.06	-0.05	7.2	6.7	222.9	218.3	218.4	213.8
Std Dv	0.8	0.6	1.9	1.5	0.49	0.45	0.14	0.13	0.4	0.4	8.4	2.0	10.0	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
25	100.3	97.8	102.8	90.9	1.07	0.97	-0.32	-0.32	7.0	6.9	295.7	266.2	237.5	213.8
28	101.3	98.4	104.2	92.1	0.65	0.62	-0.22	-0.19	7.1	6.4	271.1	252.7	229.4	213.8
31	100.9	98.5	103.7	91.9	0.62	0.56	-0.19	-0.20	6.8	7.2	258.8	242.8	227.9	213.8
34	100.0	97.1	102.6	89.6	-0.33	-0.36	0.08	0.08	7.0	7.1	300.8	308.8	208.3	213.8
Avs.	100.6	98.0	103.3	91.1	0.50	0.45	-0.16	-0.16	7.0	6.9	281.6	267.6	225.8	213.8
Std Dv	0.7	0.8	0.9	1.4	0.72	0.70	0.21	0.21	0.1	0.4	24.4	35.6	15.2	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 165 KTS														
49	100.8	98.1	103.3	91.7	-0.13	-0.11	0.01	0.01	6.9	6.6	223.7	224.7	212.8	213.8
50	101.5	98.4	104.6	92.5	-0.13	-0.16	0.03	0.02	6.9	6.1	254.1	256.4	211.9	213.8
51	100.4	97.8	102.6	90.7	0.46	0.42	-0.15	-0.15	7.2	7.3	292.7	279.1	224.3	213.8
Avs.	100.9	98.1	103.5	91.6	0.07	0.05	-0.04	-0.04	7.0	6.7	256.8	253.4	216.3	213.8
Std Dv	0.8	0.4	1.4	1.3	0.48	0.45	0.14	0.13	0.3	0.8	49.0	38.[illegible]	[illegible].8	0.0

DOT/TSC
12/14/81

TABLE NO. B.1-3.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	HEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
43	94.9	91.9	99.0	86.7	-0.03	-0.04	0.00	0.00	6.1	6.4	178.9	178.9	175.6	175.6
44	94.9	91.6	98.3	85.6	-0.81	-0.82	0.22	0.20	6.7	6.0	220.5	237.9	162.8	175.6
Avs.	94.9	91.7	98.7	86.2	-0.42	-0.43	0.11	0.10	6.4	6.2	199.7	208.4	169.2	175.6
Std Dv	0.0	0.2	0.5	0.8	0.55	0.55	0.16	0.14	0.4	0.2	29.4	41.7	9.1	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
41	98.1	96.0	99.9	88.5	-0.11	-0.10	0.01	0.01	7.2	6.9	282.2	282.9	260.1	260.8
42	100.0	97.5	102.3	90.9	-0.22	-0.22	0.05	0.04	6.9	6.0	257.1	261.2	256.6	260.8
Avs.	99.1	96.8	101.1	89.7	-0.17	-0.16	0.03	0.02	7.1	6.4	269.6	272.1	258.4	260.8
Std Dv	1.4	1.1	1.7	1.7	0.08	0.08	0.03	0.02	0.2	0.7	17.8	15.3	2.5	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
1	97.0	94.5	98.5	87.3	0.14	0.12	-0.11	-0.10	7.2	6.6	358.1	345.7	351.9	339.7
2	94.4	92.1	95.0	83.0	0.75	0.74	-0.33	-0.33	7.5	7.6	425.8	385.0	375.7	339.7
3	97.3	95.1	98.4	87.3	-0.27	-0.25	0.01	0.00	7.2	6.6	344.1	344.6	339.1	339.7
4	97.6	96.2	97.9	86.8	0.22	0.17	-0.21	-0.22	7.9	7.9	574.6	539.6	361.7	339.7
5	99.2	97.0	101.2	89.7	0.40	0.35	-0.19	-0.18	6.9	6.5	370.7	347.6	362.3	339.7
6											NO TRACKING DATA			
39	96.7	94.7	97.4	85.4	0.16	0.13	-0.07	-0.07	7.3	7.5	431.4	422.3	347.0	339.7
40	98.8	96.4	98.7	87.4	-0.14	-0.17	0.02	0.02	8.0	7.4	423.9	426.6	337.5	339.7
47	96.0	93.9	96.6	84.9	1.35	1.23	-0.41	-0.40	7.6	7.5	444.6	392.9	384.4	339.7
48	97.9	95.4	99.2	88.0	0.22	0.20	-0.09	-0.08	7.2	6.5	349.4	339.7	349.4	339.7
Avs.	97.2	95.0	98.1	86.6	0.31	0.28	-0.15	-0.15	7.4	7.1	413.6	393.8	356.5	339.7
Std Dv	1.6	1.6	1.8	2.1	0.52	0.49	0.16	0.15	0.4	0.6	76.8	68.7	17.0	0.0
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
37	93.3	91.7	92.6	81.1	-0.09	-0.10	-0.01	-0.01	7.6	7.7	655.9	653.4	483.0	481.2
38	95.3	92.9	94.6	83.0	0.22	0.20	-0.10	-0.10	7.9	7.5	1056.1	1024.5	496.0	481.2
45											NO TRACKING DATA			
46											NO TRACKING DATA			
Avs.	94.3	92.3	93.6	82.0	0.06	0.05	-0.06	-0.06	7.8	7.6	856.0	838.9	489.5	481.2
Std Dv	1.4	0.8	1.5	1.3	0.22	0.21	0.06	0.06	0.2	0.1	200.1	185.6	9.2	0.0

TABLE NO. B.1-1.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/14/81

CORRECTION DATA

SITE: 6   SIDELINE - 284 M. NORTH   JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	SEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
16	90.8	88.2	90.6	78.3	-0.28	-0.23	0.03	0.03	7.7	7.6	310.9	313.6	304.8	307.4
17	91.3	88.5	92.9	79.9	-0.43	-0.37	0.06	0.06	6.5	6.6	347.9	355.3	301.1	307.4
18	91.0	87.9	91.0	78.2	-0.26	-0.21	0.02	0.02	7.5	7.3	323.2	325.6	305.1	307.4
19	92.1	89.5	92.2	80.2	-0.16	-0.12	0.00	0.00	7.7	7.3	329.7	329.4	307.7	307.4
20	92.6	90.1	93.6	81.1	-0.50	-0.43	0.10	0.10	7.1	7.2	321.6	332.1	297.8	307.4
21	91.4	88.8	93.1	80.7	-0.33	-0.27	0.05	0.04	6.7	6.4	328.6	333.9	302.6	307.4
22	93.3	90.9	94.4	82.5	-0.58	-0.51	0.12	0.12	6.9	6.6	326.1	340.0	294.9	307.4
23	91.9	88.9	93.6	80.8	-0.27	-0.25	0.05	0.05	6.7	6.7	326.9	332.6	302.1	307.4
24	92.1	89.3	91.7	77.8	-0.67	-0.63	0.17	0.18	7.1	7.7	324.3	342.1	291.4	307.4
Avs.	91.8	89.1	92.6	80.0	-0.39	-0.34	0.07	0.07	7.1	7.0	326.6	333.8	300.8	307.4
Std Dv	0.9	1.0	1.4	1.7	0.18	0.17	0.06	0.06	0.5	0.5	10.4	12.3	5.6	0.0
TAKEOFF														
8	85.9	82.8	84.8	72.1	-0.39	-0.26	-0.03	-0.03	8.0	7.9	337.2	334.7	318.2	315.8
9	86.4	83.6	85.0	72.2	0.01	0.00	-0.09	-0.09	7.7	7.7	325.1	316.0	324.9	315.8
10	86.0	82.9	84.8	71.9	0.16	0.15	-0.14	-0.14	8.0	7.9	332.1	318.6	329.1	315.8
11	86.1	83.2	85.5	72.8	0.41	0.38	-0.21	-0.21	7.6	7.6	341.2	319.9	336.9	315.8
12	87.2	84.0	86.3	73.4	0.14	0.13	-0.14	-0.13	7.9	7.8	328.7	316.0	328.6	315.8
13											NO TRACKING DATA			
14	84.9	81.9	84.0	70.7	0.39	0.36	-0.21	-0.22	7.9	8.1	337.5	317.5	335.7	315.8
15	85.0	82.0	83.8	71.4	0.38	0.35	-0.21	-0.20	8.1	7.7	338.9	319.4	335.2	315.8
Avs.	85.9	82.9	84.9	72.1	0.16	0.16	-0.15	-0.15	7.9	7.8	334.4	320.3	329.8	315.8
Std Dv	0.9	0.9	1.0	1.0	0.31	0.26	0.08	0.08	0.2	0.2	6.5	7.2	7.4	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 100 KTS														
52	87.4	85.1	87.3	75.9	-0.51	-0.49	0.12	0.11	6.9	6.7	320.1	333.0	309.1	321.5
Avs.	87.4	85.1	87.3	75.9	-0.51	-0.49	0.12	0.11	6.9	6.7	320.1	333.0	309.1	321.5
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.1-2.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 6 SIDELINE - 284 M. NORTH JUNE 22,1980

											TRACKING DATA (METERS)			
	CORRECTED				CORRECTIONS (dB)				CONSTANTS		(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
27	89.9	87.2	89.7	77.4	-0.24	-0.23	0.04	0.03	6.8	6.5	320.9	324.8	317.7	321.5
30	90.8	88.6	91.6	78.8	-0.32	-0.31	0.06	0.06	6.9	6.9	315.2	321.7	315.0	321.5
33	90.9	88.2	90.6	78.7	0.08	0.07	-0.05	-0.05	7.6	7.3	326.5	321.6	326.4	321.5
36	91.8	89.3	93.5	81.0	0.42	0.38	-0.13	-0.13	6.6	6.5	339.3	324.5	336.2	321.5
Avg.	90.9	88.3	91.4	79.0	-0.02	-0.02	-0.02	-0.02	7.0	6.8	325.5	323.1	323.8	321.5
Std Dv	1.0	1.1	2.0	1.8	0.41	0.38	0.11	0.10	0.5	0.5	12.6	2.1	11.7	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 132 KTS														
26	92.5	89.9	93.3	81.4	-0.37	-0.35	0.07	0.07	6.9	7.3	320.2	327.7	314.1	321.5
29	93.3	90.3	93.2	80.1	-0.08	-0.09	-0.01	-0.01	7.3	7.8	437.4	436.1	322.4	321.5
32	91.5	88.7	92.2	79.8	-1.06	-1.01	0.24	0.26	6.2	6.6	293.4	321.6	293.4	321.5
35	-	89.6	92.3	79.8	0.02	0.01	-	-0.03	-	7.5	324.6	321.6	324.5	321.5
Avg.	92.4	89.6	92.7	80.3	-0.37	-0.36	0.10	0.07	6.8	7.3	343.9	351.8	313.6	321.5
Std Dv	1.3	0.8	0.7	0.9	0.60	0.56	0.18	0.16	0.8	0.6	78.2	69.0	17.4	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
25	95.4	91.7	94.6	81.1	-0.18	-0.20	0.03	0.03	8.0	7.8	375.8	379.3	318.6	321.5
28	94.6	91.7	97.2	84.2	-0.24	-0.23	0.03	0.03	6.4	6.4	339.5	343.7	317.6	321.5
31	93.6	90.7	93.9	80.4	-0.87	-0.85	0.23	0.24	7.1	7.4	392.5	423.1	298.3	321.5
34	95.1	92.7	97.5	84.6	0.33	0.30	-0.11	-0.10	6.4	6.3	340.9	328.2	334.0	321.5
Avg.	94.7	91.7	95.8	82.6	-0.24	-0.24	0.05	0.05	7.0	7.0	362.2	368.6	317.1	321.5
Std Dv	1.0	1.0	2.2	2.6	0.60	0.58	0.17	0.17	1.0	0.9	32.2	51.6	17.9	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 165 KTS														
49	-	90.4	94.6	81.9	-0.35	-0.36	-	0.08	-	6.7	389.5	400.7	312.5	321.5
50	93.9	90.9	94.8	83.4	-1.03	-0.98	0.28	0.26	7.4	6.6	318.1	347.8	294.1	321.5
51	94.2	89.9	94.7	81.0	-0.08	-0.10	0.01	0.01	7.1	6.7	382.9	383.9	320.7	321.5
Avg.	94.0	90.4	94.7	82.1	-0.49	-0.48	0.14	0.12	7.2	6.7	363.5	377.5	309.1	321.5
Std Dv	0.2	0.7	0.1	1.7	0.69	0.64	0.19	0.18	0.2	0.1	55.8	38.2	19.2	0.0

TABLE NO. B.1-3.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/14/81

SITE: 6 SIDELINE - 284 M. NORTH JUNE 22,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
43	94.2	90.3	94.7	82.7	-0.08	-0.08	0.01	0.01	7.7	6.3	315.2	315.9	297.1	297.8
44	95.2	92.7	97.7	84.9	0.34	0.31	-0.11	-0.11	6.7	6.7	311.4	300.1	308.9	297.8
Avs.	94.7	91.5	96.2	83.8	0.13	0.12	-0.05	-0.05	7.2	6.5	313.3	308.0	303.0	297.8
Std Dv	0.7	1.7	2.1	1.6	0.30	0.28	0.08	0.08	0.7	0.3	2.7	11.1	8.3	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
41	94.1	90.7	95.2	82.1	-0.05	-0.05	-0.06	-0.06	7.0	6.8	385.4	378.0	361.3	354.3
42	93.1	90.6	94.3	82.8	0.26	0.23	-0.09	-0.09	7.2	6.7	366.9	356.1	365.0	354.3
Avs.	93.6	90.7	94.8	82.5	0.10	0.09	-0.07	-0.07	7.1	6.7	376.2	367.1	363.1	354.3
Std Dv	0.7	0.1	0.7	0.5	0.22	0.20	0.02	0.02	0.1	0.1	13.1	15.5	2.6	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
1	90.1	87.3	89.8	77.5	-0.81	-0.78	0.15	0.15	7.5	7.6	398.2	416.8	397.0	415.6
2	90.9	87.8	90.0	76.7	-1.13	-1.06	0.20	0.20	7.8	7.9	783.4	830.2	392.1	415.6
3	91.1	88.3	90.2	78.3	-0.29	-0.29	-0.02	-0.02	7.9	7.5	432.6	430.3	417.7	415.6
4	91.9	89.3	90.1	78.4	-1.14	-1.07	0.27	0.25	8.4	7.8	410.2	441.6	386.0	415.6
5	90.3	87.8	89.6	77.9	-1.15	-1.11	0.25	0.24	7.6	7.3	385.4	415.6	385.4	415.6
6											NO TRACKING DATA			
39	93.2	90.5	92.3	80.4	-0.10	-0.10	-0.02	-0.02	7.7	7.4	1031.2	1025.6	417.9	415.6
40	90.9	88.3	91.0	78.9	0.03	0.01	-0.03	-0.03	7.2	7.1	422.9	418.8	419.7	415.6
47	91.4	88.5	91.8	78.6	-0.18	-0.18	0.03	0.03	6.9	6.9	547.9	553.0	411.7	415.6
48	89.5	86.7	89.2	77.0	-0.58	-0.56	0.15	0.15	7.3	7.6	397.2	415.7	397.1	415.6
Avs.	91.0	88.3	90.5	78.2	-0.59	-0.57	0.11	0.11	7.6	7.5	534.3	549.7	402.7	415.6
Std Dv	1.2	1.2	1.1	1.2	0.51	0.48	0.13	0.12	0.5	0.3	151.1	158.3	15.0	0.0
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS														
37	92.2	89.9	90.9	78.8	-0.14	-0.13	0.01	0.01	7.7	7.6	858.8	860.4	536.0	537.1
38	-	86.4	87.6	76.0	-0.24	-0.25	-	0.03	-	7.2	719.2	725.4	532.5	537.1
45											NO TRACKING DATA			
46											NO TRACKING DATA			
Avs.	92.2	88.1	89.3	77.4	-0.19	-0.19	0.01	0.02	7.7	7.4	789.0	792.9	534.3	537.1
Std Dv	-	2.5	2.4	2.0	0.07	0.08	-	0.01	-	0.2	98.7	95.4	2.5	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-1.1

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA

DOT/TSC
12/15/81

SITE: 1 CENTERLINE - CENTER JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
34	94.2	91.1	96.2	81.9	0.72	0.69	-0.24	-0.23	7.0	6.8	132.9	122.8	128.0	118.2
36	95.2	91.7	98.5	85.2	-0.15	-0.14	0.03	0.03	6.4	6.3	122.3	123.8	116.8	118.2
40	96.4	93.2	99.2	86.5	0.13	0.13	-0.05	-0.04	6.1	5.7	152.4	149.7	120.4	118.2
42	96.0	92.8	98.3	85.8	0.35	0.34	-0.12	-0.11	6.6	6.1	141.7	136.1	123.1	118.2
44	94.6	91.6	97.1	84.6	0.19	0.19	-0.06	-0.06	6.2	5.9	121.2	118.4	121.0	118.2
54	95.2	91.9	99.8	86.8	0.03	0.02	-0.01	-0.01	5.0	5.1	142.1	141.5	118.7	118.2
56	96.1	93.1	100.0	86.9	0.06	0.06	-0.02	-0.02	5.9	6.1	143.3	142.3	119.1	118.2
Avg.	95.4	92.2	98.5	85.4	0.19	0.18	-0.07	-0.06	6.2	6.0	136.6	133.5	121.0	118.2
Std Dv	0.9	0.9	1.5	1.9	0.31	0.29	0.10	0.09	0.7	0.6	12.7	13.0	4.0	0.0
TAKEOFF														
33	90.8	86.9	92.5	78.9	3.87	3.58	-1.26	-1.21	7.7	7.4	176.2	120.9	157.6	108.1
35	90.1	86.7	92.9	79.6	3.24	3.00	-1.01	-0.99	7.3	7.2	149.8	109.1	148.4	108.1
37	90.0	86.4	92.8	78.8	3.08	2.84	-0.94	-0.97	7.2	7.4	148.6	110.0	146.0	108.1
39	-	86.8	92.8	79.6	2.90	2.69	-	-0.90	-	7.3	143.7	108.1	143.7	108.1
41	89.6	86.4	92.4	79.0	2.27	2.10	-0.67	-0.69	6.9	7.1	135.7	108.5	135.3	108.1
43	89.8	86.5	92.5	79.0	2.65	2.45	-0.83	-0.83	7.4	7.4	142.7	110.2	140.0	108.1
53	89.3	86.1	91.8	78.7	3.68	3.41	-1.13	-1.10	7.4	7.2	153.8	108.2	153.5	108.1
55	88.1	84.9	89.8	77.2	3.54	3.26	-1.13	-1.06	7.7	7.2	159.5	113.7	151.7	108.1
Avg.	89.7	86.4	92.2	78.8	3.15	2.92	-1.00	-0.97	7.4	7.3	151.3	111.1	147.0	108.1
Std Dv	0.9	0.7	1.1	0.8	0.58	0.54	0.22	0.18	0.3	0.1	13.4	4.7	7.9	0.0

TABLE NO. B.2-2.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/15/81

CORRECTION DATA

SITE: 1 CENTERLINE - CENTER JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
21	87.9	85.4	89.5	76.5	0.46	0.46	-0.20	-0.20	7.0	7.1	179.5	168.2	161.3	151.2
22	89.8	87.4	94.1	82.0	0.10	0.11	-0.07	-0.06	6.2	5.7	251.2	245.0	155.0	151.2
23	88.1	85.3	89.5	76.5	0.38	0.36	-0.17	-0.17	7.5	7.4	223.1	211.8	159.3	151.2
24	89.9	87.0	93.2	81.0	0.08	0.10	-0.07	-0.06	6.5	6.0	292.9	286.1	154.8	151.2
Avs.	88.9	86.3	91.6	79.0	0.25	0.26	-0.13	-0.12	6.8	6.6	236.7	227.8	157.6	151.2
Std Dv	1.4	1.3	3.0	3.6	0.24	0.22	0.08	0.09	0.7	1.1	58.4	61.2	4.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
29	86.7	84.1	88.9	75.9	-0.29	-0.24	0.02	0.02	6.8	7.0	169.7	170.9	150.2	151.2
30	85.4	82.8	88.8	75.7	0.29	0.30	-0.14	-0.15	6.9	7.1	186.9	178.3	158.5	151.2
31	86.0	83.5	88.5	75.7	0.22	0.24	-0.12	-0.12	6.7	6.9	177.9	170.8	157.4	151.2
32	84.8	82.0	88.2	75.0	0.74	0.71	-0.24	-0.25	6.4	6.5	186.0	170.3	165.1	151.2
Avs.	85.7	83.1	88.6	75.6	0.24	0.25	-0.12	-0.12	6.7	6.9	180.2	172.6	157.8	151.2
Std Dv	1.0	1.1	0.4	0.5	0.52	0.48	0.13	0.14	0.3	0.3	9.8	4.7	7.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
49	87.1	84.5	91.4	78.8	0.16	0.16	-0.06	-0.06	6.2	6.2	184.3	180.5	154.3	151.2
50	86.9	84.4	90.0	77.0	-0.80	-0.73	0.19	0.20	6.4	6.7	165.2	176.8	141.3	151.2
51	86.5	83.7	89.5	76.8	0.60	0.54	-0.17	-0.16	6.6	6.5	253.6	239.3	160.2	151.2
52	87.0	84.4	90.2	77.7	1.09	0.98	-0.30	-0.30	6.9	6.8	232.1	210.0	167.2	151.2
Avs.	86.9	84.2	90.3	77.6	0.26	0.24	-0.08	-0.08	6.5	6.6	208.8	201.6	155.7	151.2
Std Dv	0.3	0.4	1.0	1.1	0.98	0.89	0.25	0.26	0.3	0.3	50.3	35.7	13.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
17	89.6	86.8	92.2	79.9	0.19	0.21	-0.12	-0.12	6.9	6.6	174.0	167.1	157.4	151.2
18	87.6	84.9	93.3	80.2	-0.61	-0.53	0.08	0.08	5.5	5.7	178.0	183.7	146.5	151.2
19	89.0	86.6	91.6	79.8	0.62	0.61	-0.24	-0.24	6.9	6.7	200.5	185.0	163.9	151.2
20	87.3	84.6	92.1	79.6	0.54	0.54	-0.20	-0.20	6.3	6.2	201.0	186.7	162.7	151.2
Avs.	88.4	85.7	92.3	79.9	0.19	0.21	-0.12	-0.12	6.4	6.3	188.4	180.6	157.6	151.2
Std Dv	1.3	1.4	0.9	0.3	0.69	0.64	0.17	0.17	0.8	0.6	17.6	11.2	9.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
25	89.7	87.1	93.4	80.5	0.56	0.55	-0.21	-0.22	6.6	7.0	179.4	166.6	162.7	151.2
26	90.5	87.4	94.9	81.2	0.85	0.81	-0.28	-0.31	6.6	7.2	177.0	160.2	167.0	151.2
27	91.9	88.7	96.5	83.4	-0.48	-0.44	0.07	0.07	6.1	6.0	151.5	155.4	147.3	151.2
28	91.1	88.2	95.7	82.7	-0.09	-0.06	-0.03	-0.04	6.7	6.8	173.5	171.4	153.0	151.2
Avs.	90.8	87.8	95.1	81.9	0.21	0.21	-0.11	-0.12	6.5	6.7	170.3	163.4	157.5	151.2
Std Dv	1.2	0.9	1.6	1.6	0.74	0.70	0.20	0.21	0.3	0.6	15.7	8.6	11.0	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-3.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/15/81

CORRECTION DATA

SITE: 1 CENTERLINE - CENTER JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
9	91.1	88.4	95.6	82.8	-0.28	-0.23	0.03	0.03	6.3	6.4	118.0	119.4	89.2	90.2
10	90.4	87.6	96.4	83.6	0.14	0.16	-0.08	-0.07	5.8	5.4	149.1	144.5	93.1	90.2
15	91.2	88.2	96.7	83.7	-0.07	-0.04	-0.02	-0.02	5.8	5.6	111.9	111.0	90.9	90.2
16	91.3	88.3	97.8	84.7	0.06	0.08	-0.06	-0.06	5.5	5.2	141.2	137.8	92.4	90.2
Avs.	91.0	88.1	96.6	83.7	-0.04	-0.01	-0.03	-0.03	5.8	5.7	130.0	128.2	91.4	90.2
Std Dv	0.5	0.4	1.1	1.0	0.22	0.21	0.06	0.06	0.4	0.6	22.0	19.1	2.1	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
7	86.9	84.7	87.8	76.0	1.01	0.96	-0.37	-0.35	7.2	7.0	272.0	242.1	238.4	212.1
8	87.7	85.8	91.4	79.0	1.20	1.12	-0.39	-0.42	6.9	7.2	317.8	278.3	242.2	212.1
13	86.5	84.6	88.6	76.9	0.49	0.49	-0.22	-0.22	7.1	6.9	260.4	242.2	228.1	212.1
14	86.1	84.2	90.0	78.0	-0.89	-0.72	0.10	0.10	6.3	6.3	307.7	319.4	204.4	212.1
Avs.	86.8	84.8	89.4	77.5	0.45	0.46	-0.22	-0.22	6.9	6.9	289.5	270.5	228.3	212.1
Std Dv	0.9	0.8	1.9	1.6	1.16	1.02	0.28	0.28	0.5	0.5	33.8	45.1	20.8	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
45	82.9	81.2	84.8	73.0	0.12	0.13	-0.07	-0.07	7.2	7.4	340.3	333.0	310.2	303.6
46	83.4	81.6	84.6	72.8	0.39	0.36	-0.12	-0.13	6.7	6.9	357.1	342.1	316.8	303.6
47	83.3	81.5	84.8	73.7	0.25	0.23	-0.10	-0.09	7.3	7.0	426.6	413.5	313.2	303.6
48	84.3	82.5	85.5	74.2	0.10	0.10	-0.05	-0.05	7.0	7.0	349.7	343.5	309.0	303.6
1											NO TRACKING DATA			
2											NO TRACKING DATA			
3											NO TRACKING DATA			
4											NO TRACKING DATA			
Avs.	83.5	81.7	84.9	73.4	0.21	0.20	-0.08	-0.08	7.0	7.1	368.4	358.0	312.3	303.6
Std Dv	0.8	0.7	0.5	0.8	0.16	0.14	0.04	0.04	0.3	0.2	48.3	45.7	4.3	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	81.5	80.3	80.5	69.2	0.18	0.24	-0.19	-0.19	7.4	7.3	515.4	486.2	483.4	456.0
6	80.5	79.4	82.8	71.8	-0.15	-0.08	-0.12	-0.11	6.4	6.3	684.1	656.4	475.2	456.0
11											NO TRACKING DATA			
12	79.7	78.4	79.9	68.2	-0.99	-0.72	0.08	0.08	7.8	7.8	486.8	498.8	445.0	456.0
Avs.	80.6	79.3	81.1	69.7	-0.32	-0.19	-0.08	-0.07	7.2	7.2	562.1	547.1	467.9	456.0
Std Dv	1.3	1.4	2.2	2.6	0.85	0.69	0.20	0.20	1.0	1.1	150.8	134.1	28.6	0.0

TABLE NO. B.2-4.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/15/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1 CENTERLINE - CENTER JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	FNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
69	96.2	93.0	98.5	85.2	-0.13	-0.13	0.04	0.04	6.7	6.8	140.4	142.4	116.6	118.2
70	95.7	92.7	97.2	84.4	-0.04	-0.05	0.02	0.02	7.4	7.3	133.7	134.3	117.6	118.2
Avg.	96.0	92.9	97.9	84.8	-0.08	-0.09	0.03	0.03	7.0	7.0	137.0	138.4	117.1	118.2
Std Dv	0.4	0.2	0.9	0.6	0.06	0.06	0.01	0.01	0.5	0.4	4.8	5.7	0.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
61	88.9	86.2	92.7	79.1	1.23	1.10	-0.29	-0.30	6.1	6.3	198.0	177.6	168.5	151.2
62	89.9	87.0	92.4	79.2	-0.14	-0.14	0.04	0.04	7.0	7.1	166.2	168.6	149.0	151.2
63	90.0	86.6	93.4	79.5	2.04	1.84	-0.53	-0.56	6.7	7.2	207.4	173.1	181.2	151.2
64	89.8	87.2	92.4	79.3	0.55	0.51	-0.15	-0.14	6.5	6.1	182.8	173.5	159.3	151.2
Avg.	89.7	86.8	92.7	79.3	0.92	0.83	-0.23	-0.24	6.6	6.6	188.6	173.2	164.5	151.2
Std Dv	0.6	0.6	0.6	0.2	1.14	1.03	0.29	0.31	0.5	0.7	22.1	4.5	16.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
57	91.0	88.2	96.2	83.5	1.82	1.63	-0.42	-0.41	6.0	5.9	219.5	186.6	177.8	151.2
58	92.5	89.8	96.9	83.8	0.80	0.72	-0.19	-0.20	6.2	6.5	210.6	196.1	162.4	151.2
59	91.8	89.1	96.9	84.3	0.79	0.70	-0.19	-0.18	6.3	6.2	220.4	205.8	162.0	151.2
60	91.9	89.3	95.9	83.7	1.20	1.06	-0.29	-0.28	6.4	6.2	237.1	213.7	167.7	151.2
Avg.	91.8	89.1	96.5	83.8	1.15	1.03	-0.27	-0.27	6.2	6.2	221.9	200.5	167.5	151.2
Std Dv	0.8	0.8	0.6	0.4	0.59	0.53	0.13	0.13	0.2	0.3	13.5	14.4	9.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
65	-	85.1	95.3	82.1	0.98	0.88	-	-0.20	-	5.2	196.8	180.4	164.9	151.2
66	93.4	89.8	97.8	84.1	0.44	0.39	-0.09	-0.10	5.8	5.9	226.7	218.4	157.0	151.2
67	92.2	88.9	96.7	83.9	0.60	0.52	-0.13	-0.14	6.1	6.3	265.7	252.7	159.0	151.2
68	92.4	89.0	96.9	83.5	0.74	0.66	-0.18	-0.19	6.2	6.4	281.6	263.1	161.8	151.2
Avg.	92.7	88.2	96.6	83.4	0.69	0.61	-0.13	-0.16	6.0	5.9	242.7	228.6	160.7	151.2
Std Dv	1.0	2.6	1.3	1.1	0.28	0.26	0.06	0.06	0.3	0.7	46.9	45.8	4.3	0.0

TABLE NO. B.2-1.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/15/81

CORRECTION DATA

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
34	97.1	94.0	98.9	85.8	0.71	0.68	-0.24	-0.24	7.1	7.1	130.7	120.8	129.2	119.4
36	98.4	95.4	101.5	88.4	-0.14	-0.14	0.04	0.04	6.6	6.6	129.0	130.6	118.0	119.4
40	99.1	96.5	101.6	89.4	0.14	0.13	-0.05	-0.05	6.5	6.2	143.2	140.7	121.5	119.4
42	98.9	96.3	101.1	89.1	0.35	0.34	-0.12	-0.11	6.9	6.3	142.8	137.2	124.3	119.4
44	97.6	95.0	100.5	88.6	0.19	0.19	-0.06	-0.06	6.5	6.1	122.2	119.4	122.2	119.4
54	99.6	97.3	102.8	90.9	0.03	0.02	-0.01	-0.01	5.8	5.6	143.2	142.6	119.9	119.4
56	98.8	96.7	101.7	90.4	0.06	0.06	-0.02	-0.02	6.6	6.2	144.4	143.4	120.3	119.4
Avg.	98.5	95.9	101.2	88.9	0.19	0.18	-0.07	-0.06	6.6	6.3	136.5	133.5	122.2	119.4
Std Dv	1.0	1.2	1.3	1.8	0.30	0.29	0.10	0.10	0.4	0.5	9.9	11.1	4.0	0.0
TAKEOFF														
33	93.7	90.4	95.4	82.0	3.66	3.47	-1.24	-1.27	7.7	7.8	159.9	110.0	158.8	109.3
35	93.3	90.4	95.5	83.1	3.19	2.96	-1.02	-0.98	7.5	7.2	171.4	125.3	149.6	109.3
37	93.0	90.0	95.2	82.2	2.89	2.75	-0.98	-0.98	7.6	7.6	147.2	109.4	147.1	109.3
39	-	90.5	95.9	83.0	2.84	2.62	-	-0.91	-	7.4	144.9	109.3	144.9	109.3
41	92.7	89.9	95.5	82.7	2.15	2.05	-0.65	-0.67	6.7	6.9	136.9	109.6	136.5	109.3
43	93.0	90.1	95.4	82.9	2.50	2.37	-0.79	-0.78	7.1	7.0	142.2	110.1	141.2	109.3
53	92.4	89.7	94.6	82.3	3.55	3.31	-1.12	-1.11	7.4	7.4	164.4	116.1	154.7	109.3
55	91.5	88.8	93.3	81.0	3.40	3.19	-1.10	-1.07	7.6	7.3	155.8	111.4	152.9	109.3
Avg.	92.8	90.0	95.1	82.4	3.02	2.84	-0.99	-0.97	7.4	7.3	152.8	112.7	148.2	109.3
Std Dv	0.8	0.6	0.9	0.8	0.57	0.53	0.22	0.20	0.4	0.3	12.9	6.0	7.9	0.0

TABLE NO. B.2-2.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
21	91.7	89.5	92.9	80.2	0.45	0.45	-0.20	-0.21	7.2	7.4	214.1	200.8	162.5	152.4
22	92.9	90.4	97.1	85.0	0.10	0.10	-0.07	-0.06	6.0	5.7	251.9	245.7	156.2	152.4
23	91.5	89.1	93.1	80.2	0.31	0.32	-0.16	-0.16	7.2	7.4	184.4	175.1	160.4	152.4
24	93.4	90.8	97.4	84.9	0.10	0.11	-0.06	-0.06	6.0	5.7	221.3	216.3	155.9	152.4
Avg.	92.4	89.9	95.1	82.5	0.24	0.25	-0.12	-0.12	6.6	6.6	217.9	209.5	158.8	152.4
Std Dv	1.1	0.9	3.0	3.4	0.21	0.21	0.08	0.09	0.8	1.2	34.0	36.2	3.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
29	90.4	87.8	92.6	79.7	-0.29	-0.23	0.02	0.02	7.0	7.1	170.8	171.9	151.4	152.4
30	89.4	86.9	93.2	80.0	0.28	0.30	-0.13	-0.14	6.6	7.0	188.0	179.4	159.7	152.4
31	89.9	87.4	92.0	79.3	0.24	0.24	-0.12	-0.12	7.1	7.0	168.3	161.6	158.7	152.4
32	88.4	85.9	92.3	79.1	0.73	0.70	-0.24	-0.25	6.4	6.7	204.2	187.1	166.3	152.4
Avg.	89.5	87.0	92.5	79.5	0.24	0.25	-0.12	-0.12	6.8	7.0	182.8	175.0	159.0	152.4
Std Dv	1.0	1.0	0.6	0.5	0.51	0.47	0.13	0.14	0.4	0.2	20.5	13.3	7.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
49	90.5	88.1	95.0	82.5	0.16	0.16	-0.05	-0.05	6.0	6.1	185.3	181.5	155.6	152.4
50	90.4	88.0	93.5	81.1	-0.79	-0.72	0.19	0.19	6.4	6.4	184.6	197.5	142.5	152.4
51	90.0	87.5	93.5	81.4	0.58	0.54	-0.16	-0.15	6.3	6.2	254.9	240.6	161.4	152.4
52	90.3	87.8	93.6	81.1	1.05	0.97	-0.29	-0.29	6.7	6.7	233.0	210.9	168.4	152.4
Avg.	90.3	87.9	93.9	81.5	0.25	0.24	-0.08	-0.07	6.3	6.4	214.5	207.7	157.0	152.4
Std Dv	0.2	0.3	0.9	0.8	0.96	0.88	0.25	0.25	0.3	0.3	43.1	30.7	13.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
17	93.5	90.9	95.9	83.6	0.16	0.18	-0.12	-0.12	7.1	7.1	219.1	210.5	158.6	152.4
18	92.0	89.4	97.2	84.2	-0.64	-0.54	0.08	0.08	5.8	6.2	211.8	218.5	147.7	152.4
19	93.1	90.7	96.4	84.3	0.60	0.58	-0.23	-0.23	6.7	6.6	224.9	207.7	165.1	152.4
20	91.6	89.2	97.1	84.5	0.53	0.52	-0.18	-0.18	5.8	5.8	235.6	219.0	164.0	152.4
Avg.	92.6	90.0	96.7	84.1	0.16	0.18	-0.11	-0.11	6.3	6.4	222.8	213.9	158.8	152.4
Std Dv	1.1	1.1	0.8	0.4	0.70	0.63	0.17	0.17	0.8	0.6	12.3	7.0	9.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
25	93.8	91.0	97.3	84.6	0.55	0.55	-0.22	-0.22	6.9	6.9	180.5	167.7	163.9	152.4
26	94.9	92.0	99.3	85.9	0.83	0.79	-0.28	-0.31	6.5	7.3	200.6	181.8	168.1	152.4
27	95.9	92.8	100.1	86.9	-0.47	-0.42	0.07	0.07	6.2	6.3	152.7	156.6	148.5	152.4
28	95.5	92.6	100.1	87.0	-0.12	-0.07	-0.03	-0.04	6.4	6.9	204.9	202.5	154.2	152.4
Avg.	95.0	92.1	99.2	86.1	0.20	0.21	-0.11	-0.12	6.5	6.9	184.7	177.2	158.7	152.4
Std Dv	1.1	1.0	1.6	1.3	0.73	0.68	0.20	0.21	0.3	0.5	29.2	24.2	11.0	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-3.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA

SITE: 1G   CENTERLINE - CENTER (FLUSH)   JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
9	95.7	92.8	100.4	87.3	-0.28	-0.24	0.03	0.03	6.0	6.1	118.9	120.3	90.4	91.4
10	94.6	91.7	100.6	87.9	0.17	0.17	-0.07	-0.07	5.5	5.5	117.0	113.4	94.3	91.4
15	95.5	92.6	101.2	88.0	-0.08	-0.05	-0.02	-0.02	5.6	5.4	112.9	112.0	92.2	91.4
16											NO TRACKING DATA			
Avg.	95.3	92.4	100.8	87.7	-0.06	-0.04	-0.02	-0.02	5.7	5.7	116.2	115.2	92.3	91.4
Std Dv	0.8	0.8	0.6	0.6	0.32	0.29	0.07	0.07	0.4	0.5	4.4	6.3	2.8	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
7	90.8	88.6	92.8	80.7	0.99	0.94	-0.36	-0.34	7.2	6.8	308.6	274.8	239.6	213.4
8	92.4	90.4	96.7	83.9	1.17	1.10	-0.36	-0.42	6.3	7.3	356.0	312.1	243.4	213.4
13	90.8	88.8	93.1	81.1	0.45	0.45	-0.22	-0.22	7.0	6.9	325.4	302.8	229.4	213.4
14	89.9	88.1	93.7	81.6	-0.89	-0.75	0.10	0.11	6.4	6.8	352.8	366.1	205.6	213.4
Avg.	91.0	89.0	94.1	81.8	0.43	0.43	-0.21	-0.22	6.7	6.9	335.7	313.9	229.5	213.4
Std Dv	1.2	1.2	2.2	1.8	1.14	1.03	0.27	0.29	0.6	0.3	27.8	46.8	20.8	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
45	86.6	85.0	88.8	77.1	0.10	0.12	-0.07	-0.07	7.0	7.2	446.7	437.1	311.5	304.8
46	86.9	85.3	87.2	75.9	0.38	0.36	-0.14	-0.14	7.4	7.3	358.2	343.2	318.1	304.8
47	87.0	85.4	89.8	78.1	0.23	0.23	-0.09	-0.09	6.6	6.6	460.8	446.7	314.4	304.8
48	87.5	85.9	89.1	77.3	0.07	0.08	-0.05	-0.06	7.1	7.2	454.2	446.2	310.2	304.8
1											NO TRACKING DATA			
2											NO TRACKING DATA			
3											NO TRACKING DATA			
4											NO TRACKING DATA			
Avg.	87.0	85.4	88.7	77.1	0.19	0.20	-0.09	-0.09	7.0	7.1	430.0	418.3	313.5	304.8
Std Dv	0.5	0.5	1.3	1.1	0.17	0.15	0.05	0.04	0.4	0.4	59.0	61.6	4.3	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	85.3	83.9	84.7	73.4	0.20	0.23	-0.19	-0.19	7.7	7.6	548.3	517.2	484.6	457.2
6	84.9	83.7	87.7	75.9	-0.23	-0.10	-0.11	-0.11	6.0	6.4	722.0	692.9	476.4	457.2
11											NO TRACKING DATA			
12	84.0	82.8	85.0	73.3	-0.98	-0.82	0.08	0.08	7.4	7.7	621.9	637.2	446.2	457.2
Avg.	84.7	83.4	85.8	74.2	-0.34	-0.23	-0.07	-0.07	7.0	7.2	630.7	615.8	469.1	457.2
Std Dv	0.9	0.8	2.4	2.1	0.84	0.76	0.20	0.20	1.3	1.0	123.3	126.9	28.6	0.0

TABLE NO. B.2-4.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1G　　CENTERLINE - CENTER (FLUSH)　　JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
69	99.2	96.4	101.7	89.0	-0.13	-0.13	0.04	0.04	6.7	6.6	131.7	133.6	117.8	119.4
70	99.1	96.4	101.3	88.6	-0.04	-0.04	0.01	0.01	6.9	6.9	134.8	135.4	118.9	119.4
Avs.	99.1	96.4	101.5	88.8	-0.08	-0.08	0.02	0.02	6.8	6.8	133.3	134.5	118.3	119.4
Std Dv	0.0	0.0	0.3	0.3	0.06	0.06	0.02	0.02	0.1	0.2	2.1	1.3	0.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
61	91.8	89.5	95.3	82.4	1.17	1.07	-0.29	-0.30	6.2	6.4	199.1	178.7	169.8	152.4
62	92.6	90.0	94.0	81.8	-0.14	-0.14	0.05	0.04	7.5	7.1	179.8	182.3	150.2	152.4
63	92.4	90.0	95.6	82.8	1.99	1.78	-0.53	-0.55	6.9	7.1	223.3	186.6	182.4	152.4
64	92.7	90.1	94.9	82.6	0.57	0.51	-0.15	-0.15	6.8	6.5	197.0	187.1	160.5	152.4
Avs.	92.4	89.9	94.9	82.4	0.90	0.80	-0.23	-0.24	6.8	6.8	199.8	183.7	165.7	152.4
Std Dv	0.5	0.4	0.9	0.5	1.11	1.00	0.30	0.31	0.7	0.5	21.9	4.8	16.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
57	93.9	91.6	99.1	86.8	1.77	1.60	-0.40	-0.41	5.7	5.9	220.5	187.7	179.0	152.4
58	95.6	93.0	99.6	87.3	0.79	0.71	-0.20	-0.20	6.4	6.4	239.3	223.0	163.6	152.4
59	94.7	92.6	99.4	87.7	0.76	0.68	-0.19	-0.19	6.4	6.3	221.9	207.2	163.2	152.4
60	94.0	91.9	97.7	86.0	1.16	1.04	-0.29	-0.28	6.5	6.2	237.9	214.6	168.9	152.4
Avs.	94.6	92.3	98.9	86.9	1.12	1.01	-0.27	-0.27	6.3	6.2	229.9	208.1	168.7	152.4
Std Dv	1.0	0.8	1.1	0.9	0.58	0.52	0.12	0.12	0.4	0.2	12.4	18.4	9.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
65	95.6	92.9	99.7	87.5	0.95	0.85	-0.25	-0.23	6.6	6.2	197.8	181.4	166.2	152.4
66	97.0	93.9	101.5	88.5	0.42	0.38	-0.09	-0.09	5.7	5.6	228.2	219.9	158.2	152.4
67	95.9	93.1	100.9	88.6	0.55	0.53	-0.13	-0.13	5.9	6.0	311.7	296.5	160.2	152.4
68	95.7	92.6	100.1	87.4	0.76	0.69	-0.18	-0.17	6.0	6.0	244.6	228.6	163.0	152.4
Avs.	96.0	93.1	100.6	88.0	0.67	0.61	-0.16	-0.15	6.0	5.9	245.6	231.6	161.9	152.4
Std Dv	0.8	0.7	1.0	0.8	0.29	0.25	0.08	0.07	0.4	0.3	59.0	58.6	4.3	0.0

TABLE NO. B.2-1.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
34	94.3	91.0	96.3	81.9	0.78	0.76	-0.27	-0.27	7.2	7.1	125.3	114.9	119.5	109.5
36	95.7	91.9	99.4	85.5	-0.15	-0.14	0.03	0.03	6.4	6.3	119.3	120.8	108.2	109.5
40	90.1	87.5	93.0	80.5	0.14	0.14	-0.05	-0.05	6.4	6.2	125.5	123.1	111.7	109.5
42	96.5	93.2	99.3	86.2	0.39	0.38	-0.12	-0.12	6.5	6.1	133.3	127.6	114.4	109.5
44	94.9	91.8	97.5	85.2	0.21	0.20	-0.07	-0.06	6.5	5.9	112.3	109.6	112.2	109.5
54	94.2	91.7	98.3	86.1	0.02	0.02	-0.01	-0.01	5.4	5.2	143.9	143.4	109.9	109.5
56	96.0	93.4	99.4	87.4	0.06	0.06	-0.02	-0.02	6.2	6.0	135.3	134.4	110.3	109.5
Avg.	94.5	91.5	97.6	84.7	0.21	0.20	-0.07	-0.07	6.4	6.1	127.8	124.8	112.3	109.5
Std Dv	2.3	2.2	2.6	2.8	0.33	0.32	0.11	0.11	0.6	0.6	11.6	12.6	4.1	0.0
TAKEOFF														
33	90.9	86.7	93.5	78.4	4.10	3.81	-1.27	-1.39	7.2	7.9	150.8	100.5	149.2	99.4
35	90.4	86.8	93.4	79.5	3.45	3.22	-1.06	-1.09	7.1	7.3	145.6	103.5	139.8	99.4
37	90.4	86.4	93.1	78.7	3.27	3.03	-1.03	-1.07	7.3	7.6	137.6	99.5	137.5	99.4
39	-	87.1	94.4	80.4	3.10	2.88	-	-0.90	-	6.8	135.1	99.4	135.1	99.4
41	89.9	86.3	93.3	79.4	2.44	2.26	-0.68	-0.72	6.5	6.9	127.2	99.8	126.6	99.4
43	90.0	86.3	93.3	79.4	2.82	2.60	-0.84	-0.86	6.9	7.1	132.4	100.2	131.4	99.4
53	90.5	87.1	93.4	79.7	3.94	3.65	-1.12	-1.17	6.8	7.1	145.2	99.6	145.0	99.4
55	89.8	86.4	92.8	78.4	3.78	3.51	-1.07	-1.06	6.7	6.7	143.3	99.5	143.2	99.4
Avg.	90.2	86.6	93.4	79.3	3.36	3.12	-1.01	-1.03	7.0	7.2	139.7	100.3	138.5	99.4
Std Dv	0.4	0.4	0.5	0.7	0.62	0.58	0.21	0.22	0.3	0.5	8.5	1.5	8.0	0.0

TABLE NO. B.2-2.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
21	88.4	85.8	89.9	76.7	0.51	0.51	-0.21	-0.22	7.0	7.3	192.7	179.9	152.5	142.3
22	90.2	87.6	94.3	82.3	0.11	0.12	-0.07	-0.07	6.3	5.6	271.2	264.1	146.2	142.3
23	88.4	85.5	90.9	76.9	0.41	0.40	-0.17	-0.19	6.8	7.2	175.8	165.7	151.0	142.3
24	90.0	87.3	93.5	81.3	0.15	0.15	-0.07	-0.07	6.3	5.9	213.3	207.8	146.1	142.3
Avs.	89.2	86.5	92.1	79.3	0.29	0.29	-0.13	-0.14	6.6	6.5	213.3	204.4	149.0	142.3
Std Dv	1.2	1.3	2.5	3.6	0.24	0.23	0.09	0.10	0.4	1.1	50.9	53.2	4.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
29	86.9	83.9	89.3	75.6	-0.30	-0.25	0.02	0.02	6.9	7.3	175.6	176.8	141.4	142.3
30	86.3	83.2	90.1	76.3	0.34	0.34	-0.15	-0.15	6.7	6.9	178.9	170.0	149.8	142.3
31	86.9	84.1	89.4	76.1	0.26	0.27	-0.13	-0.13	6.8	7.0	169.6	162.4	148.6	142.3
32	85.3	81.9	89.2	75.3	0.81	0.76	-0.26	-0.26	6.4	6.4	195.1	177.7	156.3	142.3
Avs.	86.3	83.3	89.5	75.8	0.28	0.28	-0.13	-0.13	6.7	6.9	179.8	171.7	149.0	142.3
Std Dv	0.9	1.2	0.5	0.6	0.56	0.51	0.14	0.14	0.3	0.5	13.4	8.7	7.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
49	88.1	85.1	93.2	79.8	0.18	0.17	-0.06	-0.06	6.1	6.2	176.1	172.2	145.5	142.3
50	87.6	84.7	91.2	77.2	-0.84	-0.77	0.20	0.22	6.4	7.0	157.0	168.7	132.4	142.3
51	87.1	84.1	91.1	77.5	0.63	0.57	-0.16	-0.17	6.1	6.3	191.7	180.3	151.4	142.3
52	87.8	84.7	91.2	77.7	1.13	1.03	-0.32	-0.34	6.9	7.3	201.5	181.2	158.3	142.3
Avs.	87.7	84.7	91.7	78.0	0.27	0.25	-0.08	-0.09	6.4	6.7	181.6	175.6	146.9	142.3
Std Dv	0.5	0.5	1.3	1.4	1.03	0.94	0.27	0.29	0.5	0.6	23.8	7.5	13.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
17	90.4	87.1	93.2	80.2	0.23	0.25	-0.13	-0.13	6.7	6.8	183.8	175.8	148.8	142.3
18	88.1	85.2	93.6	80.5	-0.67	-0.57	0.08	0.08	5.7	5.6	203.5	210.4	137.7	142.3
19	89.6	87.1	92.8	80.3	0.69	0.67	-0.26	-0.25	6.9	6.7	171.2	157.1	155.1	142.3
20	88.1	85.2	93.6	80.4	0.61	0.59	-0.20	-0.20	5.8	6.0	193.0	178.4	153.9	142.3
Avs.	89.0	86.2	93.3	80.4	0.21	0.23	-0.13	-0.12	6.3	6.3	187.9	180.4	148.9	142.3
Std Dv	1.4	1.3	0.5	0.2	0.76	0.69	0.18	0.18	0.7	0.7	16.8	27.1	9.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
25											NO TRACKING DATA			
26	91.1	87.5	96.1	82.0	0.94	0.88	-0.28	-0.31	6.0	6.7	191.0	171.6	158.4	142.3
27	91.5	87.9	96.5	82.6	-0.51	-0.47	0.07	0.07	5.8	6.1	157.4	161.6	138.6	142.3
28	92.0	88.2	97.3	82.9	-0.08	-0.06	-0.04	-0.04	5.8	6.4	195.6	192.9	144.4	142.3
Avs.	91.5	87.9	96.6	82.5	0.12	0.12	-0.08	-0.09	5.9	6.4	181.3	175.4	147.1	142.3
Std Dv	0.6	0.5	0.9	0.6	1.05	0.98	0.25	0.28	0.2	0.5	29.5	22.6	14.4	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-3.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
9	91.4	88.2	96.3	82.8	-0.24	-0.22	0.03	0.03	6.1	6.3	90.1	91.2	80.4	81.4
10	91.8	88.3	98.2	84.5	0.22	0.22	-0.08	-0.08	5.4	5.5	107.6	103.8	84.4	81.4
15	92.2	88.7	98.0	83.9	-0.05	-0.03	-0.02	-0.02	5.7	5.9	103.9	103.0	82.1	81.4
16											NO TRACKING DATA			
Avs.	91.8	88.4	97.5	83.8	-0.02	-0.01	-0.02	-0.02	5.7	5.9	100.5	99.3	82.3	81.4
Std Dv	0.5	0.4	1.5	1.2	0.33	0.31	0.08	0.08	0.5	0.6	13.0	10.0	2.8	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
7	86.4	83.9	87.4	75.0	1.08	1.01	-0.41	-0.41	7.7	7.8	263.5	233.4	229.5	203.3
8	87.1	84.6	90.2	78.4	1.28	1.19	-0.42	-0.39	7.0	6.5	389.2	338.6	233.7	203.3
13	87.5	85.1	89.1	76.7	0.54	0.53	-0.23	-0.24	7.1	7.3	252.0	233.7	219.3	203.3
14	86.9	84.5	90.8	78.5	-0.82	-0.69	0.10	0.11	6.3	6.4	261.8	272.0	195.7	203.3
Avs.	87.0	84.5	89.4	77.1	0.52	0.51	-0.24	-0.23	7.0	7.0	291.7	269.4	219.6	203.3
Std Dv	0.5	0.6	1.8	2.0	1.16	1.04	0.30	0.29	0.7	0.8	79.9	60.7	20.9	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
45	82.8	80.9	85.0	73.0	0.12	0.14	-0.07	-0.07	7.0	7.1	352.8	345.0	301.4	294.7
46	83.7	81.8	85.1	72.5	0.41	0.38	-0.14	-0.14	7.1	7.4	367.1	351.3	308.0	294.7
47	84.3	82.2	87.1	74.9	0.26	0.25	-0.09	-0.09	6.6	6.6	419.2	406.0	304.4	294.7
48	84.6	82.9	86.4	74.3	0.10	0.11	-0.06	-0.06	7.1	7.3	340.8	334.6	300.2	294.7
1											NO TRACKING DATA			
2											NO TRACKING DATA			
3											NO TRACKING DATA			
4											NO TRACKING DATA			
Avs.	83.9	82.0	85.9	73.7	0.22	0.22	-0.09	-0.09	6.9	7.1	370.0	359.2	303.5	294.7
Std Dv	1.0	1.0	1.2	1.4	0.18	0.15	0.04	0.04	0.3	0.4	42.3	39.1	4.3	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	80.6	78.9	79.6	68.0	0.21	0.24	-0.19	-0.20	7.5	7.5	559.9	527.5	474.6	447.1
6	-	78.0	81.6	69.8	-0.07	-0.02	-	-0.12	-	6.7	608.6	583.5	466.4	447.1
11											NO TRACKING DATA			
12	80.4	79.0	80.9	68.9	-0.88	-0.74	0.08	0.09	7.5	8.0	521.9	535.1	436.2	447.1
Avs.	80.5	78.6	80.7	68.9	-0.25	-0.17	-0.06	-0.08	7.5	7.4	563.5	548.7	459.1	447.1
Std Dv	0.1	0.8	1.4	1.3	0.80	0.72	0.19	0.21	0.0	1.0	61.4	43.0	28.6	0.0

TABLE NO. B.2-4.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1H   CENTERLINE - CENTER (10-METER)   JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
69	94.5	91.2	97.3	83.7	-0.14	-0.15	0.04	0.05	6.5	6.7	132.3	134.4	107.8	109.5
70	93.7	90.7	95.6	82.7	-0.05	-0.06	0.02	0.02	7.2	7.0	116.2	117.0	108.8	109.5
Avg.	94.1	90.9	96.4	83.2	-0.09	-0.10	0.03	0.03	6.9	6.9	124.3	125.7	108.3	109.5
Std Dv	0.6	0.3	1.2	0.7	0.06	0.06	0.01	0.02	0.5	0.2	11.4	12.3	0.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
61	88.8	86.1	92.6	78.9	1.30	1.16	-0.31	-0.32	6.2	6.4	206.4	183.9	159.7	142.3
62	87.7	84.8	90.3	77.1	-0.15	-0.15	0.05	0.05	6.9	7.0	157.6	160.0	140.2	142.3
63	89.9	86.8	93.6	79.6	2.13	1.92	-0.55	-0.59	6.6	7.2	199.3	164.6	172.3	142.3
64	89.8	87.0	92.4	79.5	0.61	0.54	-0.15	-0.16	6.4	6.5	174.4	165.0	150.4	142.3
Avg.	89.1	86.2	92.2	78.8	0.97	0.87	-0.24	-0.25	6.5	6.8	184.4	168.4	155.7	142.3
Std Dv	1.3	1.2	1.7	1.4	1.19	1.08	0.31	0.33	0.4	0.5	27.6	13.0	16.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
57	91.2	88.4	96.4	83.7	1.94	1.74	-0.45	-0.43	6.0	5.8	243.1	204.8	169.0	142.3
58	92.4	89.5	96.8	83.7	0.85	0.76	-0.21	-0.21	6.4	6.5	230.9	214.1	153.5	142.3
59	91.8	89.1	97.4	84.5	0.82	0.74	-0.18	-0.19	5.6	5.9	212.8	197.8	153.1	142.3
60	92.1	89.2	96.3	83.2	1.23	1.10	-0.30	-0.31	6.2	6.5	202.4	181.3	158.9	142.3
Avg.	91.9	89.0	96.7	83.8	1.21	1.08	-0.28	-0.28	6.1	6.2	222.3	199.5	158.6	142.3
Std Dv	0.6	0.6	0.6	0.7	0.64	0.57	0.15	0.13	0.5	0.5	22.3	17.0	9.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
65												NO TRACKING DATA		
66	94.7	90.6	98.4	84.7	0.46	0.41	-0.11	-0.10	6.4	6.0	219.5	210.9	148.2	142.3
67	92.6	89.2	97.4	83.9	0.60	0.53	-0.14	-0.15	6.1	6.4	183.4	173.8	150.1	142.3
68	91.8	88.4	96.8	83.0	0.81	0.73	-0.18	-0.19	5.8	6.2	200.9	187.0	153.0	142.3
Avg.	93.0	89.4	97.5	83.9	0.62	0.56	-0.14	-0.15	6.1	6.2	201.3	190.6	150.4	142.3
Std Dv	2.1	1.6	1.1	1.3	0.25	0.23	0.05	0.06	0.4	0.3	25.6	26.6	3.4	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-1.2

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA

DOT/TSC
12/16/81

SITE: 2 CENTERLINE - 150 M. WEST JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
34	96.8	93.5	99.5	86.8	0.41	0.40	-0.14	-0.13	6.9	6.5	108.1	103.0	107.6	102.6
36	98.8	95.4	103.5	90.0	-0.03	-0.03	0.00	0.00	5.5	5.6	126.7	126.7	102.6	102.6
40	97.7	94.4	101.4	88.9	0.08	0.08	-0.03	-0.03	6.1	5.4	119.0	117.6	103.7	102.6
42	97.6	94.3	102.1	89.2	0.36	0.35	-0.11	-0.10	5.9	5.5	128.5	123.3	106.9	102.6
44	97.5	94.1	100.7	87.4	0.17	0.16	-0.06	-0.06	7.1	6.9	124.4	121.9	104.7	102.6
54	98.0	95.1	101.8	88.9	0.32	0.31	-0.09	-0.09	5.9	5.9	121.5	117.3	106.3	102.6
56	97.1	94.1	102.3	89.1	0.24	0.23	-0.06	-0.06	5.3	5.5	123.6	120.4	105.3	102.6
Avs.	97.7	94.4	101.6	88.6	0.22	0.21	-0.07	-0.07	6.1	5.9	121.7	118.6	105.3	102.6
Std Dv	0.7	0.7	1.4	1.2	0.17	0.17	0.05	0.05	0.7	0.6	7.4	8.3	1.9	0.0
TAKEOFF														
33	-	86.1	90.8	77.8	-1.61	-1.42	-	0.48	-	7.8	119.8	138.0	114.1	131.3
35	88.4	85.3	91.0	78.3	-1.82	-1.67	0.47	0.45	6.7	6.3	128.8	151.6	111.5	131.3
37	88.9	85.6	91.0	77.7	-1.52	-1.38	0.43	0.42	7.2	7.0	127.4	146.1	114.5	131.3
39	88.4	85.4	90.6	77.8	-1.99	-1.85	0.55	0.53	6.8	6.6	118.8	142.9	109.1	131.3
41	88.1	85.1	90.2	77.9	-2.21	-2.02	0.62	0.56	7.0	6.3	114.2	140.3	106.9	131.3
43	88.2	85.3	89.8	77.6	-1.83	-1.63	0.52	0.48	7.2	6.7	118.8	140.4	111.1	131.3
53	88.4	85.5	91.0	78.5	-1.43	-1.35	0.38	0.37	6.6	6.4	131.0	149.8	114.8	131.3
55	87.6	84.7	88.6	75.6	-1.80	-1.65	0.54	0.54	7.4	7.5	119.0	140.7	111.0	131.3
Avs.	88.3	85.4	90.4	77.7	-1.78	-1.62	0.50	0.48	7.0	6.8	122.2	143.7	111.6	131.3
Std Dv	0.4	0.4	0.9	0.9	0.27	0.25	0.09	0.07	0.3	0.6	6.5	5.3	3.0	0.0

TABLE NO. B.2-2.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA

SITE: 2 CENTERLINE - 150 M. WEST JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
21	89.1	86.4	91.1	77.6	0.51	0.50	-0.20	-0.21	6.6	7.0	179.3	167.4	161.9	151.2
22	91.4	88.8	96.4	84.2	0.04	0.05	-0.04	-0.03	5.6	5.2	197.5	194.5	153.5	151.2
23	89.4	86.5	90.6	77.3	0.31	0.32	-0.16	-0.17	7.3	7.5	179.4	170.5	159.1	151.2
24	91.8	89.0	96.2	83.7	0.38	0.38	-0.12	-0.12	5.6	5.4	211.6	201.1	159.1	151.2
Avg.	90.4	87.6	93.6	80.7	0.31	0.31	-0.13	-0.13	6.3	6.3	191.9	183.4	158.4	151.2
Std Dv	1.7	1.7	3.9	4.6	0.24	0.23	0.08	0.10	1.0	1.4	19.2	20.7	4.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
29	87.2	84.7	90.2	77.0	-0.31	-0.26	0.03	0.03	6.5	6.8	159.6	161.1	149.8	151.2
30	86.2	83.5	90.2	77.2	0.28	0.30	-0.13	-0.14	6.5	6.6	192.5	183.6	158.5	151.2
31	87.1	84.6	90.2	77.3	-0.04	0.00	-0.05	-0.05	6.5	6.7	175.8	172.9	153.7	151.2
32	85.5	82.7	88.1	75.1	0.56	0.55	-0.22	-0.22	7.0	7.2	183.6	170.9	162.4	151.2
Avg.	86.5	83.9	89.7	76.6	0.12	0.15	-0.09	-0.09	6.6	6.8	177.9	172.1	156.1	151.2
Std Dv	1.0	1.2	1.3	1.2	0.46	0.43	0.13	0.13	0.3	0.3	17.1	11.3	6.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
49	-	85.0	92.2	79.2	0.27	0.25	-	-0.08	-	6.4	182.7	177.4	155.7	151.2
50	89.2	86.2	93.1	79.8	-0.56	-0.51	0.13	0.13	6.4	6.4	164.9	172.7	144.4	151.2
51	87.7	84.9	91.2	78.0	0.54	0.49	-0.15	-0.15	6.5	6.6	188.1	178.3	159.5	151.2
52	87.9	85.2	91.3	78.3	0.88	0.80	-0.25	-0.25	6.7	6.9	188.0	172.8	164.5	151.2
Avg.	88.3	85.3	92.0	78.8	0.28	0.26	-0.09	-0.09	6.5	6.6	180.9	175.3	156.0	151.2
Std Dv	1.1	0.7	1.1	1.0	0.75	0.68	0.28	0.20	0.2	0.2	13.4	3.6	10.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
17	90.8	87.9	94.6	81.7	0.26	0.27	-0.13	-0.13	6.4	6.4	180.9	172.5	158.5	151.2
18	89.4	86.6	94.9	81.8	-0.39	-0.31	0.02	0.03	5.4	5.9	197.0	199.0	149.7	151.2
19	-	87.4	93.6	81.1	0.56	0.56	-	-0.21	-	6.4	177.8	165.1	162.8	151.2
20	-	86.1	94.0	81.1	0.50	0.50	-	-0.19	-	6.3	215.1	200.5	162.2	151.2
Avg.	90.1	87.0	94.3	81.4	0.23	0.25	-0.05	-0.12	5.9	6.2	192.7	184.3	158.3	151.2
Std Dv	1.0	1.0	0.7	0.5	0.53	0.49	0.11	0.13	0.7	0.3	21.0	22.2	7.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
25	91.1	88.1	95.1	82.1	0.57	0.56	-0.20	-0.21	6.3	6.5	181.8	168.8	162.9	151.2
26	92.0	88.9	96.5	83.0	0.88	0.83	-0.29	-0.31	6.6	7.0	222.7	201.1	167.5	151.2
27	92.9	89.6	97.2	84.0	-0.51	-0.46	0.07	0.07	6.0	6.1	164.3	168.7	147.2	151.2
28	92.0	88.8	97.0	83.1	0.04	0.07	-0.07	-0.07	6.2	6.9	195.8	190.9	155.0	151.2
Avg.	92.0	88.8	96.4	83.0	0.24	0.25	-0.12	-0.13	6.3	6.6	191.1	182.4	158.1	151.2
Std Dv	0.9	0.8	1.2	1.0	0.75	0.70	0.19	0.20	0.3	0.5	30.2	19.9	10.9	0.0

TABLE NO. B.2-3.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA

SITE: 2 CENTERLINE - 150 M. WEST JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
9	92.8	89.6	98.1	84.7	0.05	0.07	-0.05	-0.05	6.4	6.4	113.0	110.8	92.0	90.2
10	91.4	88.0	97.4	84.0	0.14	0.14	-0.07	-0.06	5.7	5.5	99.8	97.2	92.7	90.2
15	92.4	89.3	98.0	84.9	-0.28	-0.24	0.03	0.03	5.6	5.4	104.1	105.5	89.0	90.2
16	92.8	89.5	99.4	85.7	-0.15	-0.12	0.00	0.00	5.1	5.3	118.6	118.4	90.4	90.2
Avs.	92.3	89.1	98.2	84.8	-0.06	-0.04	-0.02	-0.02	5.7	5.6	108.9	108.0	91.0	90.2
Std Dv	0.8	0.9	1.0	0.9	0.23	0.21	0.06	0.05	0.7	0.6	10.4	10.9	2.0	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
7	87.1	84.9	88.2	76.1	1.04	0.98	-0.38	-0.37	7.3	7.3	258.4	229.6	238.7	212.1
8	87.4	85.2	90.8	78.1	1.33	1.23	-0.44	-0.46	7.1	7.4	278.5	241.4	244.7	212.1
13	87.7	85.6	90.1	78.1	0.38	0.40	-0.18	-0.18	6.7	6.7	254.9	239.3	225.9	212.1
14	87.0	84.7	90.6	78.2	-0.67	-0.56	0.06	0.06	6.6	6.8	336.4	343.5	207.8	212.1
Avs.	87.3	85.1	89.9	77.6	0.52	0.51	-0.23	-0.24	6.9	7.1	282.1	263.5	229.3	212.1
Std Dv	0.4	0.5	1.5	1.2	1.09	0.97	0.28	0.28	0.4	0.4	46.2	65.7	20.0	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
45	83.7	81.9	85.0	73.2	0.29	0.26	-0.11	-0.11	7.5	7.6	487.1	470.5	314.2	303.6
46	83.7	81.9	85.2	73.2	0.45	0.42	-0.14	-0.15	7.0	7.1	345.2	329.2	318.4	303.6
47	84.0	82.2	85.4	73.7	0.14	0.15	-0.07	-0.07	7.4	7.4	350.2	342.3	310.6	303.6
48	84.3	82.8	86.2	75.1	0.08	0.09	-0.05	-0.05	6.8	6.5	352.6	346.7	308.7	303.6
1												NO TRACKING DATA		
2												NO TRACKING DATA		
3												NO TRACKING DATA		
4												NO TRACKING DATA		
Avs.	83.9	82.2	85.4	73.8	0.24	0.23	-0.09	-0.09	7.2	7.2	383.8	372.2	313.0	303.6
Std Dv	0.3	0.5	0.6	1.1	0.20	0.18	0.05	0.05	0.4	0.6	84.4	80.8	5.2	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	82.0	80.4	81.6	70.3	0.20	0.23	-0.19	-0.19	7.5	7.5	523.3	494.1	482.9	456.0
6	80.8	79.4	80.7	69.7	0.03	0.04	-0.14	-0.14	7.5	7.2	570.5	546.3	476.1	456.0
11												NO TRACKING DATA		
12	80.1	78.9	80.5	69.5	-1.08	-0.87	0.08	0.08	7.6	7.5	668.2	684.9	444.9	456.0
Avs.	81.0	79.6	80.9	69.8	-0.28	-0.20	-0.08	-0.08	7.5	7.4	587.3	575.1	468.0	456.0
Std Dv	1.4	1.1	0.8	0.6	0.98	0.83	0.20	0.20	0.1	0.2	104.5	139.5	28.7	0.0

TABLE NO. B.2-4.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 2 CENTERLINE - 150 M. WEST JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
69	96.2	93.2	100.3	87.8	-0.07	-0.07	0.02	0.02	5.8	5.5	118.9	119.9	101.8	102.6
70	95.5	92.6	98.0	85.0	0.31	0.23	-0.07	-0.07	6.8	6.7	114.1	111.3	105.2	102.6
Avs.	95.9	92.9	99.2	86.4	0.12	0.08	-0.02	-0.02	6.3	6.1	116.5	115.6	103.5	102.6
Std Dv	0.5	0.4	1.7	2.0	0.27	0.21	0.06	0.06	0.7	0.8	3.4	6.1	2.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
61	89.0	86.0	90.4	77.0	1.17	1.06	-0.34	-0.35	7.4	7.6	176.4	158.6	168.1	151.2
62	89.7	86.9	92.1	79.4	-0.19	-0.19	0.06	0.05	6.8	6.5	172.1	175.4	148.4	151.2
63	88.5	86.0	90.9	78.1	1.96	1.73	-0.55	-0.42	7.2	5.5	208.9	175.3	180.1	151.2
64	90.0	86.9	92.9	80.0	0.40	0.36	-0.11	-0.11	6.8	6.4	238.2	229.4	157.0	151.2
Avs.	89.3	86.4	91.6	78.7	0.83	0.74	-0.23	-0.21	7.0	6.5	198.9	184.7	163.4	151.2
Std Dv	0.8	0.6	1.4	1.7	1.14	1.02	0.33	0.27	0.4	1.1	37.9	37.8	16.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
57	91.3	88.3	96.3	83.6	1.81	1.61	-0.39	-0.41	5.6	5.8	228.7	194.3	177.9	151.2
58	92.6	89.7	96.4	83.4	0.69	0.61	-0.18	-0.18	6.4	6.5	191.7	180.0	160.9	151.2
59	91.7	88.7	97.2	84.0	1.00	0.90	-0.22	-0.23	5.6	5.9	201.4	184.1	165.4	151.2
60	91.5	88.9	95.7	82.8	1.49	1.32	-0.36	-0.37	6.2	6.4	222.3	194.8	172.5	151.2
Avs.	91.8	88.9	96.4	83.5	1.25	1.11	-0.29	-0.30	6.0	6.1	211.0	188.3	169.2	151.2
Std Dv	0.7	0.7	0.8	0.6	0.61	0.54	0.13	0.13	0.5	0.4	21.3	9.1	9.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
65	93.3	90.2	98.7	86.0	0.73	0.65	-0.15	-0.14	5.4	5.2	245.2	230.1	161.1	151.2
66	93.4	89.6	97.7	84.6	0.47	0.43	-0.11	-0.11	5.9	5.7	167.8	160.8	157.7	151.2
67	93.3	89.6	98.5	85.3	0.35	0.31	-0.07	-0.07	5.1	5.2	207.1	200.9	155.9	151.2
68	-	88.9	96.5	83.3	0.76	0.69	-	-0.19	-	6.2	179.2	167.2	162.0	151.2
Avs.	93.3	89.6	97.9	84.8	0.58	0.52	-0.11	-0.13	5.4	5.6	199.8	189.8	159.2	151.2
Std Dv	0.0	0.7	1.2	1.4	0.24	0.22	0.06	0.06	0.6	0.6	42.2	39.4	3.5	0.0

TABLE NO. B.2-1.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/16/81

CORRECTION DATA

SITE: 3 CENTERLINE - 150 M. EAST JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		TRACKING DATA (METERS) (REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
34	94.7	91.3	96.7	82.2	1.09	1.05	-0.33	-0.35	6.3	6.7	154.8	137.4	150.9	133.9
36	94.9	91.3	96.8	83.5	-0.12	-0.11	0.03	0.03	6.9	6.8	136.3	137.5	132.7	133.9
40	95.7	92.5	98.3	85.9	0.09	0.09	-0.03	-0.03	6.1	5.6	150.3	148.3	135.6	133.9
42	95.2	92.0	97.4	85.2	0.20	0.20	-0.08	-0.07	6.9	6.0	156.2	152.3	137.3	133.9
44											NO TRACKING DATA			
54	94.9	91.8	97.8	85.0	0.08	0.07	-0.03	-0.03	6.2	6.2	163.0	161.5	135.2	133.9
56	94.5	91.2	96.6	84.3	-0.17	-0.17	0.05	0.05	6.9	6.2	162.8	165.7	131.6	133.9
Avs.	95.0	91.7	97.3	84.3	0.19	0.19	-0.06	-0.07	6.6	6.3	153.9	150.5	137.2	133.9
Std Dv	0.5	0.6	0.8	1.5	0.51	0.50	0.15	0.16	0.4	0.5	11.1	13.2	7.8	0.0
TAKEOFF														
33	93.0	88.9	96.7	82.4	8.38	7.74	-2.66	-2.65	7.4	7.4	187.1	82.2	186.8	82.1
35	92.1	88.6	95.6	82.3	8.42	7.78	-2.70	-2.55	7.7	7.2	212.5	94.7	184.4	82.1
37	91.6	88.1	95.0	81.2	7.86	7.30	-2.51	-2.54	7.5	7.6	177.0	82.2	176.9	82.1
39	92.6	89.2	97.1	83.1	7.69	7.17	-2.17	-2.33	6.7	7.2	173.5	82.1	173.6	82.1
41	92.2	88.9	96.6	82.9	7.07	6.57	-2.03	-2.15	6.8	7.2	163.9	82.1	163.9	82.1
43	91.8	88.4	96.1	82.2	7.25	6.72	-2.12	-2.24	6.9	7.3	166.7	82.2	166.5	82.1
53	92.0	88.7	96.0	82.4	8.59	7.95	-2.50	-2.55	7.0	7.2	201.4	88.8	186.2	82.1
55	90.8	87.6	94.4	81.5	8.34	7.75	-2.63	-2.47	7.6	7.1	182.8	82.2	182.6	82.1
Avs.	92.0	88.6	95.9	82.2	7.95	7.37	-2.41	-2.43	7.2	7.3	183.1	84.6	177.6	82.1
Std Dv	0.7	0.5	1.0	0.7	0.62	0.56	0.29	0.19	0.4	0.2	18.2	5.1	9.6	0.0

TABLE NO. B.2-2.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/18/81

CORRECTION DATA

SITE: 3 CENTERLINE - 150 M. EAST JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
21	88.4	85.7	90.1	77.1	0.41	0.42	-0.18	-0.17	6.9	6.7	178.6	168.3	160.5	151.2
22	87.9	85.2	89.7	77.6	0.24	0.26	-0.14	-0.13	7.6	7.1	373.5	358.1	157.7	151.2
23	87.5	84.8	89.1	75.9	0.34	0.36	-0.17	-0.18	7.4	7.6	179.9	170.4	159.6	151.2
24	88.5	85.6	90.7	76.8	-0.19	-0.15	0.00	0.00	7.3	7.8	305.5	305.9	151.0	151.2
Avg.	88.1	85.3	89.9	76.8	0.20	0.22	-0.12	-0.12	7.3	7.3	259.4	250.7	157.2	151.2
Std Dv	0.6	0.5	0.8	0.9	0.33	0.31	0.10	0.10	0.4	0.6	118.3	117.9	5.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
29	87.0	84.4	89.6	77.0	-0.22	-0.16	0.00	0.00	6.6	6.5	167.8	167.8	151.2	151.2
30	85.8	83.1	89.2	75.5	0.41	0.41	-0.17	-0.18	6.6	7.3	167.1	157.8	160.1	151.2
31	86.0	83.5	88.2	75.6	0.44	0.44	-0.18	-0.18	6.8	6.7	181.1	170.3	160.8	151.2
32	84.4	81.8	87.8	74.4	0.92	0.87	-0.30	-0.29	6.6	6.4	186.1	167.6	167.8	151.2
Avg.	85.8	83.2	88.7	75.6	0.39	0.39	-0.16	-0.16	6.6	6.7	175.5	165.9	160.0	151.2
Std Dv	1.3	1.3	1.0	1.3	0.57	0.52	0.15	0.15	0.1	0.5	11.7	6.8	8.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
49	87.7	85.1	91.3	78.7	0.00	0.01	-0.02	-0.02	6.8	6.9	190.2	189.0	152.1	151.2
50	87.2	84.4	90.2	77.5	-0.67	-0.61	0.16	0.16	6.7	6.6	167.9	177.6	142.9	151.2
51	86.1	83.6	90.0	76.6	0.67	0.61	-0.17	-0.18	6.2	6.5	188.4	176.5	161.4	151.2
52	87.1	84.5	90.3	78.0	1.25	1.14	-0.36	-0.34	7.0	6.6	180.0	159.8	170.3	151.2
Avg.	87.0	84.4	90.5	77.7	0.31	0.29	-0.10	-0.09	6.7	6.7	181.6	175.7	156.7	151.2
Std Dv	0.8	0.8	0.7	1.1	1.02	0.93	0.27	0.26	0.4	0.2	12.5	14.7	14.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
17	89.4	86.8	91.9	79.3	0.23	0.23	-0.13	-0.13	7.1	7.1	158.2	151.7	157.6	151.2
18	88.1	85.3	93.0	79.6	-0.81	-0.71	0.15	0.15	6.4	6.6	162.1	171.0	143.3	151.2
19	89.4	87.0	92.9	80.9	0.64	0.63	-0.23	-0.22	6.5	6.2	183.8	169.3	164.1	151.2
20	87.6	84.9	92.5	79.6	0.72	0.69	-0.23	-0.24	6.0	6.1	191.5	175.2	165.2	151.2
Avg.	88.6	86.0	92.6	79.8	0.19	0.21	-0.11	-0.11	6.5	6.5	173.9	166.8	157.6	151.2
Std Dv	1.1	1.3	0.6	0.9	0.86	0.79	0.22	0.22	0.6	0.5	19.9	12.7	12.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
25	90.1	87.1	93.3	81.0	0.48	0.48	-0.18	-0.18	6.5	6.4	165.0	154.6	161.4	151.2
26	90.9	87.7	94.9	81.8	0.78	0.75	-0.27	-0.28	6.8	6.9	180.6	164.6	165.9	151.2
27	92.1	88.8	96.1	83.0	-0.44	-0.39	0.06	0.06	6.2	6.4	148.0	151.4	147.8	151.2
28	91.2	88.1	95.5	81.8	0.01	0.03	-0.06	-0.06	6.5	7.0	159.8	156.6	154.2	151.2
Avg.	91.0	87.9	95.0	81.9	0.21	0.22	-0.11	-0.11	6.5	6.7	163.4	156.8	157.3	151.2
Std Dv	1.0	0.9	1.5	1.0	0.66	0.62	0.18	0.18	0.3	0.4	16.6	6.9	9.8	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-3.3

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA

DOT/TSC
12/18/81

SITE: 3 CENTERLINE - 150 M. EAST JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
9	93.1	90.2	97.9	84.8	-0.41	-0.38	0.07	0.07	5.9	6.1	89.4	91.9	87.7	90.2
10	92.1	89.2	98.4	85.3	0.33	0.32	-0.11	-0.11	5.1	5.4	110.7	105.6	94.6	90.2
15	90.9	88.1	95.6	83.3	0.12	0.13	-0.07	-0.06	6.1	5.6	100.5	98.0	92.5	90.2
16	91.1	87.9	97.0	83.6	0.22	0.23	-0.09	-0.09	5.6	5.9	103.5	99.8	93.6	90.2
Avg.	91.8	88.8	97.2	84.2	0.06	0.07	-0.05	-0.05	5.7	5.8	101.0	98.8	92.1	90.2
Std Dv	1.3	1.3	1.5	1.2	0.40	0.38	0.10	0.10	0.5	0.4	10.9	6.9	3.7	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
7	89.4	87.2	92.0	80.3	0.87	0.83	-0.30	-0.29	6.6	6.3	285.9	257.2	235.8	212.1
8	87.7	85.9	91.2	78.7	1.10	1.03	-0.38	-0.40	7.0	7.4	251.0	221.9	240.0	212.1
13	86.7	84.7	88.9	77.5	0.55	0.55	-0.24	-0.22	6.8	6.5	282.9	261.3	229.6	212.1
14	86.6	84.4	89.9	77.3	-0.83	-0.74	0.13	0.14	6.9	7.0	221.6	231.8	202.9	212.1
Avg.	87.6	85.6	90.5	78.5	0.42	0.42	-0.20	-0.19	6.8	6.8	260.4	243.0	227.1	212.1
Std Dv	1.6	1.6	1.7	1.7	1.06	0.98	0.28	0.29	0.2	0.7	37.0	23.5	20.4	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
45	83.3	81.7	85.4	73.7	0.04	0.06	-0.05	-0.05	7.1	7.2	320.3	315.4	308.3	303.6
46	84.3	82.4	84.8	72.6	0.34	0.32	-0.12	-0.12	7.1	7.2	443.2	426.2	315.7	303.6
47	83.6	81.9	85.0	74.1	0.36	0.33	-0.13	-0.11	7.3	6.7	369.7	355.4	315.9	303.6
48	84.3	82.4	86.1	75.2	0.14	0.13	-0.06	-0.06	6.7	6.4	369.5	361.8	310.0	303.6
1												NO TRACKING DATA		
2												NO TRACKING DATA		
3												NO TRACKING DATA		
4												NO TRACKING DATA		
Avg.	83.9	82.1	85.3	73.9	0.22	0.21	-0.09	-0.08	7.0	6.9	375.7	364.7	312.5	303.6
Std Dv	0.6	0.4	0.7	1.3	0.19	0.17	0.05	0.04	0.3	0.5	62.0	56.2	4.7	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	83.1	81.9	83.0	72.8	0.22	0.19	-0.18	-0.17	7.2	6.9	561.4	529.9	483.0	456.0
6	81.9	80.9	82.3	71.1	-0.33	-0.22	-0.13	-0.13	7.6	7.7	745.0	716.4	474.2	456.0
11												NO TRACKING DATA		
12	80.6	79.7	80.4	69.0	-1.24	-0.99	0.08	0.08	7.8	8.1	680.8	696.5	445.7	456.0
Avg.	81.9	80.8	81.9	71.0	-0.45	-0.34	-0.08	-0.07	7.5	7.6	662.4	647.6	467.6	456.0
Std Dv	1.7	1.5	1.9	2.7	1.04	0.85	0.20	0.19	0.4	0.9	131.8	144.8	27.6	0.0

TABLE NO. B.2-4.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/17/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 3 CENTERLINE - 150 M. EAST JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
69	95.6	92.3	96.8	83.6	-0.14	-0.14	0.05	0.05	7.2	7.1	137.7	139.8	131.9	133.9
70	95.6	92.4	98.0	84.6	-0.17	-0.18	0.06	0.06	6.7	6.9	135.7	138.3	131.4	133.9
Avs.	95.6	92.4	97.4	84.1	-0.15	-0.16	0.05	0.05	7.0	7.0	136.7	139.1	131.6	133.9
Std Dv	0.0	0.1	0.8	0.7	0.02	0.03	0.01	0.01	0.4	0.1	1.4	1.0	0.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
61	87.9	85.1	90.5	77.4	0.77	0.68	-0.19	-0.19	6.3	6.3	193.6	180.7	162.0	151.2
62	89.2	86.6	91.2	78.5	0.09	0.07	-0.02	-0.02	6.4	6.4	169.9	168.7	152.3	151.2
63	88.6	85.5	91.1	77.8	2.11	1.89	-0.59	-0.60	7.1	7.3	205.0	169.7	182.7	151.2
64	88.7	85.6	91.2	78.4	0.79	0.71	-0.20	-0.20	6.6	6.6	188.8	175.8	162.4	151.2
Avs.	88.6	85.7	91.0	78.0	0.94	0.84	-0.25	-0.25	6.6	6.6	189.3	173.7	164.8	151.2
Std Dv	0.7	0.8	0.4	0.6	1.04	0.93	0.30	0.30	0.5	0.6	17.9	6.9	15.6	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
57	90.4	87.5	94.3	81.4	1.80	1.62	-0.46	-0.51	6.5	7.1	212.0	179.9	178.2	151.2
58	91.5	89.0	96.1	84.1	0.70	0.64	-0.17	-0.16	5.8	5.4	187.1	175.2	161.4	151.2
59	90.4	87.8	94.7	81.9	0.53	0.60	-0.17	-0.18	6.4	6.7	168.0	157.9	160.8	151.2
60	90.9	88.2	95.2	82.9	0.85	0.77	-0.21	-0.22	6.1	6.3	180.6	167.0	163.5	151.2
Avs.	90.8	88.1	95.1	82.6	0.97	0.91	-0.25	-0.27	6.2	6.4	186.9	170.0	166.0	151.2
Std Dv	0.6	0.8	1.0	1.5	0.70	0.59	0.17	0.20	0.4	0.9	22.7	11.9	10.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
65	91.8	88.3	95.2	81.9	1.18	1.05	-0.31	-0.31	6.8	6.8	215.5	194.1	167.8	151.2
66	-	89.4	97.4	84.2	0.37	0.33	-	-0.09	-	5.9	177.0	171.2	156.3	151.2
67	91.6	88.2	95.0	82.2	0.81	0.73	-0.22	-0.22	6.9	6.8	182.2	169.1	162.8	151.2
68	91.5	87.7	96.9	83.9	0.61	0.59	-0.14	-0.14	5.2	5.2	189.5	178.4	160.6	151.2
Avs.	91.6	88.4	96.1	83.0	0.74	0.67	-0.22	-0.19	6.3	6.2	191.0	178.2	161.9	151.2
Std Dv	0.2	0.9	1.5	1.4	0.42	0.37	0.12	0.12	1.4	1.0	21.0	13.9	5.9	0.0

TABLE NO. B.2-1.4

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA

DOT/TSC
12/18/81

SITE: 4 SIDELINE - 164 M. NORTH JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
34	93.2	90.1	94.5	80.6	-0.81	-0.76	0.22	0.23	6.5	6.8	181.8	196.5	176.7	191.0
36	92.4	89.9	93.9	81.4	-1.16	-1.08	0.33	0.33	6.7	6.7	178.0	199.2	170.6	191.0
40	93.4	90.6	94.3	81.8	-0.66	-0.60	0.18	0.17	7.2	7.0	290.5	307.4	180.5	191.0
42	93.3	90.7	93.2	80.7	-0.80	-0.74	0.24	0.24	7.7	7.6	265.7	285.6	177.7	191.0
44	94.3	91.3	96.0	82.9	0.11	0.11	-0.05	-0.05	6.9	6.9	212.6	209.4	193.9	191.0
54	92.2	89.9	92.2	80.1	-0.32	-0.29	0.09	0.09	7.4	7.3	304.7	313.2	185.8	191.0
56	91.9	89.2	91.8	79.7	0.13	0.12	-0.05	-0.04	7.6	7.1	319.3	314.9	193.6	191.0
Avs.	92.9	90.3	93.7	81.0	-0.50	-0.46	0.14	0.14	7.2	7.1	250.4	260.9	182.7	191.0
Std Dv	0.9	0.7	1.6	1.2	0.54	0.50	0.16	0.16	0.5	0.3	64.7	61.7	9.7	0.0
TAKEOFF														
33	92.3	88.7	93.3	79.5	0.47	0.46	-0.19	-0.19	7.5	7.7	199.9	188.8	195.8	184.9
35	91.9	88.9	92.8	80.4	0.67	0.64	-0.24	-0.23	7.5	7.2	207.4	192.7	198.9	184.9
37	91.7	88.7	92.6	80.2	0.19	0.17	-0.08	-0.08	7.3	7.0	190.4	185.6	189.6	184.9
39	92.1	89.0	92.6	80.2	0.63	0.59	-0.23	-0.21	7.7	7.2	207.0	193.4	197.8	184.9
41	91.5	88.7	92.7	80.1	0.20	0.18	-0.08	-0.08	7.3	7.3	200.6	195.6	189.6	184.9
43	91.2	88.3	92.1	79.6	0.22	0.20	-0.08	-0.08	7.2	6.9	191.0	186.0	189.9	184.9
53	91.4	88.0	92.4	79.4	1.29	1.14	-0.40	-0.39	7.8	7.5	209.0	185.7	208.1	184.9
55	91.1	87.6	92.1	78.6	1.11	1.05	-0.35	-0.35	7.4	7.5	214.5	192.3	206.2	184.9
Avs.	91.6	88.5	92.6	79.8	0.60	0.55	-0.21	-0.20	7.5	7.3	202.5	190.0	197.0	184.9
Std Dv	0.5	0.5	0.4	0.6	0.45	0.41	0.13	0.13	0.2	0.3	9.3	4.3	7.9	0.0

TABLE NO. B.2-2.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/18/81

CORRECTION DATA

SITE: 4 SIDELINE - 164 M. NORTH JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYBY - TARGET INDICATED AIRSPEED 93 KTS														
21	87.7	85.7	88.3	76.3	0.07	0.12	-0.11	-0.11	7.4	7.5	235.9	228.2	220.1	212.9
22	89.3	86.7	91.2	77.7	0.01	0.01	-0.05	-0.05	7.1	7.7	253.9	249.8	216.5	212.9
23	85.4	83.2	84.9	72.4	-2.05	-1.95	0.59	0.59	7.5	7.4	185.9	223.1	177.4	212.9
24	87.2	84.7	88.0	74.1	-1.28	-1.24	0.35	0.39	7.2	7.9	193.5	216.6	190.2	212.9
Avs.	87.4	85.1	88.1	75.1	-0.81	-0.76	0.19	0.20	7.3	7.6	217.3	229.4	201.1	212.9
Std Dv	1.9	1.9	3.2	2.8	1.27	1.23	0.41	0.42	0.2	0.3	40.3	17.6	25.3	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS														
29	87.8	85.5	88.8	76.6	-0.33	-0.23	0.02	0.02	7.4	7.4	214.8	216.0	211.7	212.9
30	86.6	84.8	88.4	76.5	-0.92	-0.88	0.20	0.21	6.9	7.1	241.9	258.6	199.1	212.9
31	87.2	85.1	88.6	76.3	-0.20	-0.12	-0.02	-0.02	7.3	7.4	217.1	215.9	214.2	212.9
32	87.4	85.5	89.4	77.3	0.59	0.58	-0.23	-0.23	6.9	7.1	230.8	214.0	229.7	212.9
Avs.	87.2	85.2	88.8	76.7	-0.21	-0.16	-0.01	-0.01	7.1	7.2	226.2	226.1	213.7	212.9
Std Dv	0.6	0.4	0.6	0.5	0.76	0.73	0.22	0.22	0.3	0.2	15.5	26.6	15.3	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS														
49	-	86.4	90.4	78.9	-0.15	-0.12	-	0.02	-	7.1	222.6	224.1	211.5	212.9
50	87.9	85.6	90.5	78.0	-0.20	-0.21	0.05	0.05	7.0	7.2	245.4	249.2	209.7	212.9
51	87.7	85.9	89.3	78.0	-0.11	-0.12	0.02	0.02	7.1	7.0	228.9	230.6	211.4	212.9
52	87.9	85.2	90.9	77.4	0.50	0.47	-0.14	-0.16	6.5	7.4	282.7	268.7	224.0	212.9
Avs.	87.8	85.8	90.3	78.1	0.01	0.01	-0.02	-0.02	6.9	7.2	244.9	243.2	214.2	212.9
Std Dv	0.2	0.6	0.8	0.8	0.40	0.38	0.14	0.12	0.5	0.3	33.0	24.6	8.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
17	88.9	86.5	91.2	78.5	-1.47	-1.26	0.31	0.31	6.7	6.9	207.2	230.2	191.7	212.9
18	89.8	88.3	93.3	81.9	-0.72	-0.57	0.09	0.09	6.6	6.6	262.7	271.3	206.2	212.9
19	89.7	87.3	92.2	79.8	-0.34	-0.37	0.05	0.05	7.0	6.9	243.3	246.9	209.8	212.9
20	89.5	87.8	93.1	81.3	-0.27	-0.16	-0.02	-0.02	6.4	6.5	274.6	272.3	214.7	212.9
Avs.	89.5	87.5	92.5	80.4	-0.70	-0.59	0.11	0.11	6.7	6.7	246.9	255.2	205.6	212.9
Std Dv	0.5	1.0	1.2	1.9	0.67	0.58	0.17	0.17	0.3	0.2	36.1	25.0	12.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 155 KTS														
25	93.9	90.3	97.7	84.2	1.44	1.34	-0.46	-0.46	6.9	6.9	281.0	240.9	248.4	212.9
26	91.4	89.0	94.4	82.1	-0.98	-0.96	0.23	0.23	6.8	6.7	228.4	247.2	196.7	212.9
27	93.6	89.4	96.3	82.5	-1.13	-1.14	0.28	0.29	6.8	6.9	232.7	256.1	193.5	212.9
28	91.6	89.3	94.4	82.6	-1.44	-1.31	0.34	0.33	7.1	6.8	237.5	265.4	190.5	212.9
Avs.	92.6	89.5	95.7	82.9	-0.53	-0.52	0.10	0.10	6.9	6.9	244.9	252.4	207.3	212.9
Std Dv	1.6	0.7	1.9	1.1	1.62	1.53	0.46	0.46	0.2	0.1	29.8	13.1	33.7	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-3.4

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA

DOT/TSC
12/18/81

SITE: 4   SIDELINE - 164 M. NORTH   JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
9	92.1	89.2	95.8	82.9	0.22	0.24	-0.13	-0.13	6.9	7.1	204.6	196.0	182.7	175.0
10	92.1	89.7	96.4	84.0	0.47	0.42	-0.17	-0.17	6.5	6.6	207.7	195.5	185.8	175.0
15	91.2	88.3	95.3	82.6	-0.22	-0.19	0.01	0.01	6.2	6.4	175.4	175.9	174.6	175.0
16	92.3	90.2	95.6	83.4	-0.55	-0.55	0.11	0.12	7.1	7.5	208.3	216.0	168.8	175.0
Avg.	91.9	89.4	95.8	83.2	-0.02	-0.02	-0.04	-0.04	6.7	6.9	199.0	195.9	178.0	175.0
Std Dv	0.6	1.0	0.6	0.8	0.56	0.53	0.16	0.16	0.5	0.6	19.4	20.1	9.5	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
7	88.7	86.2	89.8	77.5	0.62	0.55	-0.26	-0.25	7.6	7.5	344.4	318.5	280.9	259.8
8	87.2	85.4	89.9	77.4	-0.81	-0.83	0.14	0.14	6.9	7.3	399.0	417.6	248.2	259.8
13	88.9	86.6	90.5	78.0	0.03	0.10	-0.11	-0.11	7.3	7.4	276.8	267.7	268.6	259.8
14	87.7	85.9	89.1	77.5	-1.38	-1.33	0.37	0.36	7.6	7.5	245.9	274.9	232.4	259.8
Avg.	88.1	86.0	89.8	77.6	-0.38	-0.38	0.03	0.03	7.3	7.4	316.5	319.7	257.5	259.8
Std Dv	1.0	0.6	0.7	0.4	1.08	1.05	0.34	0.33	0.4	0.1	84.1	84.5	26.4	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
45	86.4	84.4	88.3	76.0	0.13	0.11	-0.06	-0.06	7.2	7.3	439.2	430.4	345.5	338.6
46	85.9	83.8	86.3	74.4	0.42	0.39	-0.15	-0.14	7.5	7.4	454.5	434.4	354.2	338.6
47	86.6	84.3	88.7	75.2	0.16	0.14	-0.06	-0.07	6.8	7.6	455.1	445.1	346.1	338.6
48	86.2	83.8	86.9	74.7	-0.21	-0.22	0.04	0.04	7.5	7.4	445.2	450.4	334.7	338.6
1											NO TRACKING DATA			
2											NO TRACKING DATA			
3											NO TRACKING DATA			
4											NO TRACKING DATA			
Avg.	86.3	84.1	87.6	75.1	0.12	0.10	-0.06	-0.06	7.2	7.4	448.5	440.1	345.1	338.6
Std Dv	0.4	0.4	1.4	0.8	0.32	0.31	0.10	0.09	0.4	0.2	9.4	11.3	9.8	0.0
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
5	83.1	81.3	82.1	70.8	-0.07	0.06	-0.14	-0.14	7.9	7.7	503.2	483.0	500.1	480.0
6	83.2	81.4	82.9	71.0	0.10	0.02	-0.13	-0.13	7.7	7.7	538.9	518.9	498.4	480.0
11											NO TRACKING DATA			
12	82.4	80.7	82.6	70.7	-1.04	-1.08	0.15	0.16	7.7	7.8	669.0	700.5	458.4	480.0
Avg.	82.9	81.1	82.6	70.8	-0.34	-0.33	-0.04	-0.04	7.8	7.7	570.4	567.5	485.6	480.0
Std Dv	0.7	0.6	0.6	0.2	0.87	0.91	0.23	0.24	0.2	0.1	123.4	164.9	33.4	0.0

TABLE NO. B.2-4.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/18/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 4 SIDELINE - 164 M. NORTH JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
69	91.8	89.1	93.2	79.8	-0.43	-0.41	0.14	0.14	7.1	7.5	194.7	203.4	182.8	191.0
70	92.3	89.8	94.5	81.0	0.24	0.22	-0.06	-0.07	6.3	7.0	234.4	229.1	195.4	191.0
Avg.	92.0	89.4	93.8	80.4	-0.09	-0.09	0.04	0.03	6.7	7.2	214.6	216.3	189.1	191.0
Std Dv	0.3	0.5	0.9	0.8	0.47	0.45	0.14	0.15	0.6	0.4	28.1	18.2	8.9	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 93 KTS														
61	88.4	85.9	89.0	76.6	0.89	0.78	-0.24	-0.24	7.3	7.3	236.5	219.1	229.9	212.9
62	87.4	84.9	88.7	75.7	-0.36	-0.36	0.11	0.11	7.2	7.6	256.1	265.1	205.7	212.9
63	87.7	85.4	88.4	75.9	0.84	0.76	-0.24	-0.24	7.4	7.6	301.6	279.9	229.4	212.9
64	87.3	84.8	88.9	75.3	0.18	0.16	-0.05	-0.05	7.3	7.7	257.4	253.3	216.4	212.9
Avg.	87.7	85.3	88.8	75.9	0.39	0.33	-0.10	-0.10	7.3	7.5	262.9	254.4	220.3	212.9
Std Dv	0.6	0.6	0.3	0.7	0.73	0.67	0.21	0.21	0.1	0.2	33.7	31.8	14.2	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
57	91.7	89.5	95.2	82.6	0.88	0.77	-0.21	-0.22	6.4	6.8	294.4	273.1	229.5	212.9
58	91.3	88.2	95.4	81.4	0.55	0.52	-0.13	-0.15	5.9	6.7	267.2	253.6	224.3	212.9
59	91.7	89.5	94.7	82.2	0.38	0.35	-0.11	-0.11	7.0	7.2	299.2	289.0	220.5	212.9
60	90.6	87.3	94.3	80.3	0.29	0.27	-0.07	-0.08	6.2	6.9	259.1	252.0	218.9	212.9
Avg.	91.3	88.6	94.9	81.6	0.52	0.48	-0.13	-0.14	6.4	6.9	280.0	266.9	223.3	212.9
Std Dv	0.7	1.4	0.6	1.3	0.32	0.27	0.07	0.07	0.5	0.3	24.3	21.5	5.8	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 155 KTS														
65	92.6	90.3	95.3	82.9	0.22	0.20	-0.06	-0.06	7.1	7.2	244.7	240.0	217.2	212.9
66	92.0	88.2	95.1	81.6	-0.30	-0.30	0.08	0.08	6.4	6.6	242.1	249.4	206.8	212.9
67	92.8	90.2	95.4	83.0	0.10	0.08	-0.02	-0.03	6.9	7.1	244.1	242.1	214.7	212.9
68	92.3	88.9	96.1	82.4	0.46	0.43	-0.12	-0.13	6.5	6.9	264.7	253.7	222.1	212.9
Avg.	92.4	89.4	95.5	82.5	0.12	0.10	-0.03	-0.03	6.7	7.0	248.9	246.3	215.2	212.9
Std Dv	0.4	1.2	0.6	0.8	0.39	0.37	0.10	0.11	0.4	0.4	12.9	7.8	7.9	0.0

TABLE NO. B.2-1.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/18/81

CORRECTION DATA

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
34	91.4	88.3	92.9	79.2	1.13	1.08	-0.35	-0.34	6.6	6.6	216.4	191.9	215.4	191.0
36	91.8	88.1	92.9	79.1	0.75	0.71	-0.25	-0.25	7.1	7.1	211.1	194.8	206.9	191.0
40	91.1	87.5	91.2	77.1	0.58	0.54	-0.21	-0.21	7.8	7.7	210.4	197.7	203.2	191.0
42	91.4	88.2	92.0	78.1	0.87	0.82	-0.30	-0.27	7.6	7.0	213.8	195.3	209.1	191.0
44	91.3	87.8	91.9	78.1	0.52	0.49	-0.18	-0.18	7.3	7.3	202.8	191.8	202.0	191.0
54	89.8	86.6	89.9	76.3	0.28	0.25	-0.09	-0.09	7.4	7.6	210.1	204.1	196.5	191.0
56	89.3	86.1	88.9	75.5	-0.10	-0.10	0.03	0.03	7.7	7.8	190.6	192.4	189.2	191.0
Avg.	90.9	87.5	91.4	77.6	0.58	0.54	-0.19	-0.19	7.3	7.3	207.9	195.4	203.2	191.0
Std Dv	1.0	0.9	1.6	1.5	0.44	0.42	0.14	0.14	0.4	0.3	9.5	4.8	9.4	0.0
TAKEOFF														
33	90.2	87.4	92.2	78.7	2.61	2.35	-0.77	-0.84	7.3	7.9	251.6	196.9	236.2	184.9
35	89.9	87.4	92.6	79.5	1.92	1.77	-0.55	-0.60	7.0	7.5	246.3	205.2	221.9	184.9
37	90.1	87.6	93.0	80.0	2.19	2.00	-0.62	-0.67	7.0	7.5	239.8	195.2	227.1	184.9
39	89.7	87.2	91.8	79.8	1.57	1.50	-0.52	-0.51	7.6	7.4	218.0	185.8	216.9	184.9
41	89.5	87.3	92.2	80.2	1.42	1.34	-0.44	-0.44	7.0	7.0	213.8	185.2	213.4	184.9
43	89.3	86.9	91.7	79.6	1.69	1.59	-0.55	-0.53	7.4	7.2	219.0	185.0	218.9	184.9
53	89.6	87.0	91.4	78.7	1.80	1.70	-0.58	-0.59	7.5	7.6	221.1	185.1	220.9	184.9
55	88.6	86.1	90.3	77.7	1.93	1.74	-0.56	-0.55	7.4	7.4	241.3	203.0	219.7	184.9
Avg.	89.6	87.1	91.9	79.3	1.89	1.75	-0.57	-0.59	7.3	7.4	231.4	192.7	221.9	184.9
Std Dv	0.5	0.5	0.9	0.9	0.40	0.34	0.10	0.13	0.3	0.3	16.1	9.2	7.6	0.0

TABLE NO. B.2-2.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/10/81

CORRECTION DATA

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYBY - TARGET INDICATED AIRSPEED 93 KTS														
21	87.2	85.3	87.9	75.6	0.08	0.14	-0.10	-0.10	7.1	7.0	236.3	228.3	220.4	212.9
22	85.7	83.2	88.6	75.1	-0.14	-0.13	-0.02	-0.02	6.7	7.3	327.4	324.9	214.6	212.9
23	89.6	86.5	91.9	77.5	1.69	1.55	-0.50	-0.56	6.6	7.4	259.9	218.4	253.4	212.9
24	88.3	85.7	89.8	76.8	0.98	0.90	-0.37	-0.38	7.7	7.9	280.9	251.6	237.8	212.9
Avg.	87.7	85.2	89.6	76.2	0.65	0.61	-0.25	-0.26	7.0	7.4	276.1	255.8	231.5	212.9
Std Dv	2.0	1.7	2.2	1.4	1.03	0.93	0.28	0.31	0.6	0.4	47.4	58.9	21.6	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS														
29	86.9	85.2	88.1	76.1	-0.28	-0.20	0.00	0.00	7.1	7.1	215.9	216.0	212.7	212.9
30	86.2	83.8	89.2	76.6	0.87	0.83	-0.31	-0.32	7.1	7.2	240.2	217.0	235.7	212.9
31	86.9	84.9	88.2	76.3	0.13	0.17	-0.11	-0.11	6.9	7.1	224.7	216.9	220.6	212.9
32	84.4	82.2	86.3	73.9	-0.11	-0.05	-0.04	-0.04	7.2	7.2	227.4	224.2	216.0	212.9
Avg.	86.1	84.0	88.0	75.7	0.15	0.19	-0.11	-0.12	7.1	7.2	227.0	218.5	221.3	212.9
Std Dv	1.4	1.7	1.5	1.5	0.62	0.56	0.17	0.17	0.2	0.1	12.3	4.6	12.4	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS														
49	86.4	84.0	89.7	77.2	0.24	0.22	-0.08	-0.08	6.8	6.7	248.0	241.3	218.9	212.9
50	86.6	85.0	88.9	77.4	-0.67	-0.58	0.15	0.15	6.6	6.7	224.4	236.3	202.2	212.9
51	86.1	83.8	88.8	76.3	0.67	0.60	-0.20	-0.19	7.1	6.8	235.6	220.8	227.1	212.9
52	87.1	85.0	88.8	76.9	0.57	0.51	-0.18	-0.17	7.4	7.2	233.9	221.3	225.1	212.9
Avg.	86.6	84.5	89.0	77.0	0.20	0.19	-0.08	-0.07	7.0	6.9	235.5	229.9	218.3	212.9
Std Dv	0.5	0.8	0.6	0.6	0.75	0.66	0.20	0.19	0.4	0.3	11.9	12.8	13.8	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
17	91.0	88.6	93.5	80.9	1.06	1.00	-0.38	-0.38	7.2	7.2	246.8	218.7	240.3	212.9
18	88.5	86.0	92.6	80.2	-0.30	-0.22	0.00	0.00	6.6	6.4	225.2	225.2	212.9	212.9
19	90.6	88.6	92.3	80.5	0.78	0.71	-0.30	-0.30	7.5	7.3	306.4	279.1	233.7	212.9
20	87.9	85.6	92.2	79.9	0.43	0.44	-0.18	-0.18	6.5	6.3	246.4	230.7	227.4	212.9
Avg.	89.5	87.2	92.7	80.4	0.49	0.48	-0.21	-0.21	6.9	6.8	256.2	238.4	228.6	212.9
Std Dv	1.9	2.0	0.7	0.5	0.72	0.64	0.20	0.20	0.6	0.6	42.8	33.8	14.3	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 155 KTS														
25	89.8	87.9	92.3	80.9	-0.73	-0.66	0.14	0.13	6.8	6.5	222.1	232.9	203.0	212.9
26	91.9	88.3	95.7	82.8	1.47	1.37	-0.49	-0.46	7.1	6.7	251.3	214.9	249.0	212.9
27	92.7	89.9	96.3	83.8	0.45	0.35	-0.17	-0.17	6.9	6.8	291.9	275.4	225.7	212.9
28	93.4	89.6	97.1	83.9	0.89	0.83	-0.31	-0.30	7.1	6.9	235.6	213.0	235.6	212.9
Avg.	91.9	88.9	95.3	82.9	0.52	0.47	-0.21	-0.20	7.0	6.7	250.3	234.1	228.3	212.9
Std Dv	1.9	1.2	2.6	1.7	1.14	1.06	0.33	0.31	0.2	0.2	37.0	35.5	23.7	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-3.5

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA

DOT/TSC
12/18/81

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
9	91.0	89.0	93.6	81.9	-0.84	-0.71	0.16	0.16	7.1	6.7	189.4	199.9	165.9	175.0
10	88.1	85.5	92.4	79.5	-0.75	-0.64	0.14	0.14	6.4	6.5	171.0	179.6	166.6	175.0
15	91.4	89.6	94.6	82.9	-0.17	-0.10	-0.02	-0.02	6.9	6.5	181.7	180.6	176.1	175.0
16	90.1	87.0	95.3	81.8	0.25	0.26	-0.12	-0.13	6.1	6.3	200.3	191.3	183.2	175.0
Avs.	90.2	87.8	94.0	81.5	-0.38	-0.30	0.04	0.04	6.6	6.5	185.6	187.8	173.0	175.0
Std Dv	1.8	2.3	1.5	1.7	0.63	0.56	0.16	0.17	0.5	0.2	15.2	11.8	10.2	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
7	88.6	86.3	89.4	76.7	0.62	0.61	-0.27	-0.28	7.6	7.8	285.9	263.1	282.3	259.8
8	87.6	84.8	92.1	78.9	2.05	1.87	-0.55	-0.58	6.4	6.6	341.9	280.0	317.2	259.8
13	88.2	86.1	89.6	77.0	0.40	0.43	-0.21	-0.22	7.4	7.6	277.4	259.9	277.4	259.8
14	87.4	84.9	91.1	78.2	0.22	0.25	-0.14	-0.15	6.6	6.8	277.2	263.8	273.0	259.8
Avs.	88.0	85.5	90.6	77.7	0.82	0.79	-0.29	-0.31	7.0	7.2	295.6	266.7	287.5	259.8
Std Dv	0.7	1.0	1.6	1.3	1.02	0.90	0.22	0.23	0.7	0.7	38.1	11.1	24.7	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
45	83.3	81.4	84.3	72.4	0.03	0.05	-0.05	-0.05	7.8	7.6	352.9	348.0	343.3	338.6
46	85.1	83.2	86.1	74.1	0.18	0.15	-0.08	-0.07	7.2	7.1	452.9	442.2	346.8	338.6
47	84.0	81.6	84.4	72.4	0.22	0.21	-0.09	-0.09	7.0	7.4	348.4	338.6	348.3	338.6
48	85.7	83.5	87.1	74.5	0.37	0.33	-0.12	-0.12	7.0	7.2	488.9	470.1	352.1	338.6
1											NO TRACKING DATA			
2											NO TRACKING DATA			
3											NO TRACKING DATA			
4											NO TRACKING DATA			
Avs.	84.6	82.4	85.5	73.3	0.20	0.18	-0.08	-0.08	7.3	7.3	410.8	399.8	347.6	338.6
Std Dv	1.3	1.4	1.7	1.4	0.17	0.14	0.04	0.04	0.5	0.2	87.0	81.2	4.5	0.0
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
5	82.9	81.1	81.7	69.9	0.45	0.36	-0.23	-0.24	7.5	7.6	715.4	666.0	515.6	480.0
6	80.6	79.0	80.9	69.2	-0.25	-0.09	-0.12	-0.12	7.4	7.5	586.7	565.3	498.1	480.0
11											NO TRACKING DATA			
12	80.9	79.1	81.2	69.0	-0.70	-0.50	0.00	0.00	7.2	7.8	541.3	540.7	480.5	480.0
Avs.	81.5	79.7	81.3	69.4	-0.17	-0.08	-0.12	-0.12	7.4	7.6	614.4	590.7	498,1	480.0
Std Dv	1.7	1.7	0.6	0.7	0.82	0.61	0.16	0.17	0.3	0.3	127.7	93.9	24.8	0.0

TABLE NO. B.2-4.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/18/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 5　　SIDELINE - 150 M. SOUTH　　JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
69	90.8	87.5	90.4	76.8	0.32	0.29	-0.10	-0.10	7.7	7.8	214.0	207.6	196.8	191.0
70	89.6	86.7	89.7	75.6	-0.28	-0.28	0.09	0.10	7.3	8.0	229.6	236.1	185.7	191.0
Avg.	90.2	87.1	90.1	76.2	0.02	0.01	-0.01	0.00	7.5	7.9	221.8	221.9	191.3	191.0
Std Dv	0.8	0.6	0.5	0.8	0.42	0.40	0.13	0.14	0.3	0.2	11.1	20.2	7.9	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 93 KTS														
61	86.0	83.7	88.4	75.6	0.45	0.39	-0.11	-0.11	6.4	6.7	237.9	229.0	221.1	212.9
62	87.9	85.7	88.2	75.9	0.23	0.19	-0.06	-0.06	7.8	7.9	225.0	220.8	217.0	212.9
63	86.6	84.1	88.4	75.5	1.46	1.29	-0.40	-0.41	7.5	7.7	253.3	224.1	240.7	212.9
64	88.3	86.1	88.5	75.7	0.40	0.37	-0.12	-0.12	7.5	7.5	223.9	215.8	220.9	212.9
Avg.	87.2	84.9	88.4	75.7	0.63	0.56	-0.17	-0.17	7.3	7.4	235.0	222.4	225.0	212.9
Std Dv	1.4	1.4	0.2	0.2	0.68	0.61	0.19	0.19	0.8	0.6	16.9	6.8	13.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
57	89.1	86.6	92.4	79.9	1.15	1.03	-0.30	-0.31	6.9	7.0	242.2	218.9	235.6	212.9
58	90.8	88.8	93.0	80.2	0.24	0.21	-0.07	-0.08	7.3	7.8	228.1	223.2	217.7	212.9
59	89.2	86.6	92.9	80.4	0.42	0.37	-0.11	-0.11	6.9	6.9	252.8	243.7	220.9	212.9
60	91.6	89.5	93.6	81.4	0.93	0.82	-0.25	-0.26	7.2	7.3	238.5	219.9	230.9	212.9
Avg.	90.2	87.9	93.0	80.5	0.68	0.61	-0.18	-0.19	7.1	7.3	240.4	226.4	226.3	212.9
Std Dv	1.5	1.8	0.6	0.8	0.52	0.47	0.13	0.14	0.3	0.5	12.5	14.3	10.3	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 155 KTS														
65	90.6	87.6	94.4	81.9	0.84	0.74	-0.20	-0.20	6.4	6.6	262.5	244.6	228.5	212.9
66	93.0	90.6	96.2	82.9	0.71	0.67	-0.19	-0.21	6.9	7.7	320.1	300.3	226.9	212.9
67	90.6	87.6	94.1	81.5	0.51	0.44	-0.12	-0.12	6.6	6.6	256.5	245.7	222.3	212.9
68	91.7	89.2	95.1	82.2	0.34	0.29	-0.08	-0.09	6.6	7.1	294.4	286.1	219.1	212.9
Avg.	91.5	88.7	94.9	82.1	0.60	0.53	-0.15	-0.15	6.6	7.0	283.3	269.2	224.2	212.9
Std Dv	1.4	1.7	1.1	0.7	0.27	0.25	0.07	0.07	0.3	0.7	36.2	34.7	5.3	0.0

TABLE NO. B.2-1.5G

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA

DOT/TSC
12/19/81

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
34	94.9	92.1	97.0	84.2	1.12	1.07	-0.35	-0.36	6.8	6.8	219.1	194.4	216.1	191.7
36	93.5	90.2	94.8	81.6	0.75	0.70	-0.25	-0.25	7.3	7.2	207.8	191.9	207.6	191.7
40	95.4	92.0	95.9	82.4	0.56	0.53	-0.20	-0.20	7.5	7.6	207.6	195.3	203.9	191.7
42	95.6	92.4	96.9	83.2	0.86	0.82	-0.28	-0.29	7.1	7.4	214.6	196.1	209.8	191.7
44	95.0	92.1	96.1	83.3	0.51	0.49	-0.18	-0.17	7.3	7.1	202.8	191.8	202.7	191.7
54	94.3	91.4	94.2	81.2	0.27	0.25	-0.09	-0.09	7.4	7.5	205.4	199.6	197.3	191.7
56	93.9	90.6	94.1	80.7	-0.12	-0.11	0.03	0.03	7.3	7.4	191.3	193.1	189.9	191.7
Avs.	94.7	91.5	95.6	82.4	0.56	0.54	-0.19	-0.19	7.2	7.3	206.9	194.6	203.9	191.7
Std Dv	0.9	0.9	1.3	1.4	0.44	0.42	0.14	0.14	0.3	0.3	9.7	3.0	9.3	0.0
TAKEOFF														
33	95.5	92.6	97.4	84.0	2.56	2.37	-0.79	-0.84	7.5	7.9	260.0	203.6	236.9	185.6
35	95.7	92.9	98.0	85.7	1.88	1.77	-0.58	-0.58	7.4	7.3	247.1	206.0	222.6	185.6
37	95.9	93.2	98.2	85.8	2.15	2.01	-0.66	-0.65	7.4	7.3	240.5	195.9	227.9	185.6
39	95.6	93.2	97.6	86.4	1.64	1.53	-0.53	-0.48	7.6	6.9	231.2	197.1	217.7	185.6
41	95.4	93.1	98.0	86.6	1.47	1.38	-0.46	-0.43	7.4	6.9	227.7	197.3	214.2	185.6
43	95.3	92.7	97.6	86.0	1.77	1.64	-0.56	-0.52	7.6	7.1	233.1	196.9	219.7	185.6
53	95.6	92.5	97.8	84.3	1.93	1.77	-0.57	-0.61	7.4	7.9	228.7	191.4	221.7	185.6
55	94.2	91.5	96.7	83.7	1.91	1.77	-0.53	-0.55	7.0	7.4	241.9	203.6	220.6	185.6
Avs.	95.4	92.7	97.7	85.3	1.91	1.78	-0.58	-0.58	7.4	7.3	238.8	199.0	222.6	185.6
Std Dv	0.6	0.6	0.5	1.2	0.36	0.33	0.11	0.14	0.2	0.4	11.9	5.3	7.6	0.0

TABLE NO. B.2-2.5G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/19/81

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
21	91.9	89.4	92.3	80.0	0.12	0.12	-0.12	-0.11	7.8	7.6	237.1	229.1	221.2	213.8
22	90.1	88.0	92.0	79.8	-0.17	-0.17	-0.02	-0.03	7.4	7.5	328.0	325.4	215.5	213.8
23	93.8	90.8	95.9	82.3	1.65	1.54	-0.54	-0.58	7.3	7.7	265.7	223.5	254.2	213.8
24	92.5	90.2	94.2	81.9	0.94	0.89	-0.36	-0.36	7.7	7.7	281.6	252.4	238.5	213.8
Avg.	92.1	89.6	93.6	81.0	0.63	0.59	-0.26	-0.27	7.5	7.6	278.1	257.6	232.4	213.8
Std Dv	1.9	1.5	2.2	1.6	1.01	0.95	0.29	0.31	0.3	0.1	46.5	57.4	21.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
29	91.7	89.3	93.5	81.0	-0.29	-0.21	0.00	0.00	7.3	7.4	216.7	216.9	213.6	213.8
30	91.0	88.8	94.3	82.0	0.84	0.82	-0.30	-0.31	6.9	7.1	241.0	217.9	236.5	213.8
31	91.7	89.3	93.7	81.0	0.12	0.16	-0.11	-0.11	7.0	7.3	225.6	217.7	221.5	213.8
32	89.2	87.4	91.2	79.5	-0.15	-0.07	-0.05	-0.05	7.2	7.2	256.2	252.6	216.9	213.8
Avg.	90.9	88.7	93.2	80.9	0.13	0.18	-0.11	-0.12	7.1	7.2	234.9	226.3	222.1	213.8
Std Dv	1.4	1.1	1.7	1.3	0.62	0.56	0.16	0.17	0.2	0.2	21.3	21.5	12.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
49	91.9	89.7	95.7	83.4	0.23	0.22	-0.08	-0.08	6.4	6.6	248.8	242.1	219.7	213.8
50	92.9	90.4	95.6	82.9	-0.63	-0.59	0.15	0.15	6.9	6.8	225.2	237.1	203.1	213.8
51	91.6	89.4	95.0	82.8	0.65	0.60	-0.18	-0.19	6.5	6.6	228.0	213.9	228.0	213.8
52	93.0	90.2	95.3	82.3	0.57	0.52	-0.17	-0.18	7.2	7.4	261.8	247.7	226.0	213.8
Avg.	92.3	90.0	95.4	82.8	0.20	0.19	-0.07	-0.07	6.8	6.9	241.0	235.2	219.2	213.8
Std Dv	0.9	0.6	0.4	0.6	0.72	0.67	0.19	0.19	0.5	0.4	21.4	18.2	13.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
17	95.7	92.9	98.2	85.5	1.03	0.99	-0.36	-0.38	7.3	7.2	241.6	214.3	241.1	213.8
18	93.4	91.0	97.6	85.4	-0.33	-0.24	0.00	0.00	6.5	6.4	245.4	245.4	213.8	213.8
19	95.2	92.7	97.4	85.2	0.74	0.71	-0.30	-0.28	7.3	7.0	250.9	228.7	234.6	213.8
20	92.9	90.6	97.2	85.0	0.44	0.44	-0.18	-0.18	6.3	6.4	247.2	231.5	228.3	213.8
Avg.	94.3	91.8	97.6	85.3	0.47	0.47	-0.21	-0.21	6.9	6.8	246.3	230.0	229.4	213.8
Std Dv	1.7	1.5	0.5	0.3	0.72	0.65	0.20	0.20	0.6	0.5	4.8	15.7	14.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
25	94.8	92.4	97.4	85.8	-0.78	-0.73	0.14	0.13	7.1	6.5	242.5	254.1	204.0	213.8
26	96.1	92.9	100.3	88.1	1.45	1.36	-0.45	-0.44	6.7	6.5	262.8	224.9	249.8	213.8
27	97.3	94.5	100.9	88.5	0.34	0.36	-0.18	-0.17	7.1	6.9	245.6	231.9	226.5	213.8
28	97.3	94.3	101.6	89.1	0.82	0.80	-0.30	-0.28	6.9	6.5	258.8	234.1	236.4	213.8
Avg.	96.4	93.5	100.1	87.9	0.46	0.45	-0.20	-0.19	6.9	6.6	252.4	236.3	229.2	213.8
Std Dv	1.5	1.2	2.3	1.8	1.15	1.08	0.31	0.29	0.2	0.2	12.1	15.4	23.6	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-3.5G

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA

DOT/TSC
12/19/81

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
9											NO TRACKING DATA			
10											NO TRACKING DATA			
15	96.2	93.5	99.8	87.2	-0.14	-0.12	-0.02	-0.02	6.9	6.7	177.0	175.9	176.8	175.6
16	95.0	92.1	99.7	87.3	0.23	0.25	-0.13	-0.13	6.6	6.4	200.9	191.9	183.9	175.6
Avs.	95.6	92.8	99.8	87.3	0.05	0.06	-0.07	-0.07	6.8	6.6	188.9	183.9	180.3	175.6
Std Dv	0.8	1.0	0.1	0.0	0.26	0.26	0.08	0.08	0.2	0.2	16.9	11.3	5.0	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
7	92.4	90.1	93.7	81.3	0.61	0.58	-0.28	-0.27	7.6	7.5	330.6	304.3	283.3	260.8
8	91.8	89.4	95.6	83.3	2.00	1.84	-0.60	-0.59	6.9	6.9	363.6	298.1	318.1	260.8
13	92.6	90.3	94.1	81.9	0.39	0.42	-0.21	-0.21	7.4	7.3	286.4	268.3	278.4	260.8
14	92.2	89.8	95.9	83.5	0.17	0.21	-0.14	-0.14	6.8	6.8	335.4	319.4	273.9	260.8
Avs.	92.3	89.9	94.8	82.5	0.79	0.76	-0.31	-0.30	7.2	7.1	329.0	297.5	288.4	260.8
Std Dv	0.4	0.5	1.3	1.3	1.01	0.90	0.25	0.24	0.5	0.4	39.1	26.2	24.7	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
45	88.4	86.6	89.9	78.5	0.01	0.04	-0.04	-0.04	7.4	7.4	366.0	361.0	344.4	339.7
46	90.0	88.1	91.4	79.3	0.15	0.15	-0.08	-0.07	7.2	7.2	406.8	397.2	347.9	339.7
47	88.6	86.8	89.5	77.9	0.21	0.21	-0.09	-0.09	7.4	7.5	385.5	374.8	349.4	339.7
48	90.4	88.4	92.3	79.9	0.35	0.33	-0.12	-0.12	6.9	7.0	435.9	419.2	353.2	339.7
1											NO TRACKING DATA			
2											NO TRACKING DATA			
3											NO TRACKING DATA			
4											NO TRACKING DATA			
Avs.	89.3	87.5	90.8	78.9	0.18	0.18	-0.08	-0.08	7.2	7.2	398.6	388.0	348.7	339.7
Std Dv	1.2	1.1	1.6	1.1	0.17	0.15	0.04	0.04	0.3	0.3	36.7	31.3	4.5	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	86.4	84.9	85.8	74.5	0.31	0.38	-0.24	-0.24	7.7	7.7	545.1	507.6	516.7	481.2
6	84.9	83.7	85.4	74.5	-0.18	-0.05	-0.12	-0.12	7.6	7.3	515.6	496.8	499.3	481.2
11											NO TRACKING DATA			
12	84.7	83.3	84.9	73.7	-0.81	-0.56	0.00	0.00	7.7	7.7	620.1	619.5	481.6	481.2
Avs.	85.4	84.0	85.4	74.2	-0.23	-0.08	-0.12	-0.12	7.7	7.6	560.2	541.3	499.2	481.2
Std Dv	1.3	1.2	0.6	0.6	0.79	0.67	0.17	0.17	0.1	0.3	76.2	96.0	24.8	0.0

TABLE NO. B.2-4.5G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/19/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
69	94.5	91.2	95.0	81.6	0.34	0.30	-0.09	-0.09	7.1	7.1	199.3	193.4	197.5	191.7
70	93.9	90.7	93.3	79.8	-0.30	-0.28	0.09	0.10	7.7	7.9	186.8	192.1	186.5	191.7
Avg.	94.2	91.0	94.2	80.7	0.02	0.01	0.00	0.01	7.4	7.5	193.1	192.7	192.0	191.7
Std Dv	0.4	0.4	1.2	1.3	0.45	0.41	0.13	0.13	0.4	0.6	8.8	1.0	7.8	0.0
500 FT. FLYOVER - TARGET INDICATED 93 KTS														
61	92.0	89.3	94.6	81.7	0.45	0.40	-0.11	-0.11	6.4	6.6	238.9	230.0	222.1	213.8
62	93.6	90.5	94.5	81.2	0.22	0.19	-0.06	-0.06	7.6	7.6	225.8	221.6	217.9	213.8
63	92.1	89.4	93.7	80.8	1.45	1.29	-0.41	-0.42	7.7	7.8	254.2	224.9	241.6	213.8
64	93.4	90.3	94.2	80.8	0.45	0.39	-0.12	-0.12	7.5	7.5	269.6	259.8	221.8	213.8
Avg.	92.8	89.9	94.3	81.1	0.64	0.57	-0.17	-0.18	7.3	7.4	247.1	234.1	225.8	213.8
Std Dv	1.0	0.8	0.5	0.5	0.67	0.60	0.19	0.20	0.7	0.7	23.2	21.4	13.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
57	95.1	92.2	93.7	85.8	1.16	1.04	-0.30	-0.30	6.8	6.9	256.6	231.9	236.6	213.8
58	-	93.0	98.7	85.1	0.25	0.22	-	-0.07	-	7.3	261.9	256.1	218.6	213.8
59	94.6	91.8	98.1	85.4	0.42	0.37	-0.11	-0.11	6.9	7.0	253.6	244.5	221.8	213.8
60	96.9	93.7	99.8	86.4	0.93	0.84	-0.25	-0.24	7.0	6.9	251.9	232.3	231.8	213.8
Avg.	95.5	92.7	98.8	85.7	0.69	0.62	-0.22	-0.18	6.9	7.0	256.0	241.2	227.2	213.8
Std Dv	1.8	1.0	0.8	0.7	0.52	0.47	0.14	0.13	0.1	0.2	5.4	14.1	10.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
65	95.7	92.6	100.0	87.4	0.82	0.73	-0.19	-0.20	6.4	6.4	243.3	226.8	229.4	213.8
66	-	95.3	102.2	88.6	0.77	0.71	-	-0.19	-	6.9	321.2	301.5	227.8	213.8
67	-	93.0	100.4	87.5	0.50	0.45	-	-0.12	-	6.6	257.6	246.9	223.1	213.8
68	97.6	93.9	100.5	87.1	0.33	0.31	-0.09	-0.09	7.4	6.9	295.0	286.8	220.0	213.8
Avg.	96.6	93.7	100.8	87.6	0.60	0.55	-0.14	-0.15	6.9	6.7	279.3	265.5	225.0	213.8
Std Dv	1.3	1.5	1.2	0.8	0.28	0.25	0.07	0.07	0.7	0.3	43.4	42.4	5.3	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-1.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/19/81

CORRECTION DATA

SITE: 6 SIDELINE - 284 M. NORTH JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
34	86.6	84.7	86.0	73.8	-0.84	-0.76	0.22	0.22	7.3	7.4	310.2	332.7	286.7	307.4
36	87.1	85.0	88.5	75.7	-0.94	-0.86	0.21	0.21	6.0	6.2	311.6	337.6	283.8	307.4
40	87.1	84.8	87.6	76.1	-0.60	-0.54	0.12	0.11	6.5	6.1	459.3	479.6	294.4	307.4
42	82.6	80.7	82.9	71.6	-0.77	-0.68	0.18	0.17	7.0	6.6	438.4	464.6	290.1	307.4
44	88.6	86.4	88.3	76.8	-0.45	-0.41	0.11	0.11	7.6	7.1	323.7	335.1	297.0	307.4
54	86.4	84.3	86.9	75.0	-0.26	-0.24	0.06	0.06	6.9	6.7	349.4	354.8	301.0	307.4
56	87.1	85.1	86.6	75.0	0.23	0.22	-0.07	-0.07	7.1	6.9	515.6	503.8	314.6	307.4
Avg.	86.5	84.4	86.7	74.9	-0.52	-0.47	0.12	0.12	6.9	6.7	386.9	401.4	295.4	307.4
Std Dv	2.0	1.9	2.1	1.9	0.44	0.40	0.11	0.11	0.6	0.5	91.0	84.6	11.3	0.0
TAKEOFF														
33	-	84.0	86.5	73.7	-0.51	-0.43	-	0.08	-	7.9	309.1	316.4	296.7	303.7
35	88.0	85.5	87.4	75.6	-0.10	-0.08	-0.01	-0.01	7.8	7.3	322.2	320.8	305.0	303.7
37	-	84.6	87.0	74.8	-0.50	-0.47	-	0.09	-	7.2	371.4	382.8	294.7	303.7
39	87.8	85.1	86.7	74.4	-0.08	-0.05	-0.02	-0.02	8.1	7.7	305.9	303.8	305.8	303.7
41	87.6	84.9	87.4	73.8	-0.34	-0.27	0.05	0.05	7.6	8.2	303.0	307.2	299.4	303.7
43	87.2	84.5	87.0	73.9	-0.32	-0.33	0.07	0.07	7.6	7.6	303.9	310.3	297.4	303.7
53	87.9	85.2	88.2	73.9	0.32	0.30	-0.11	-0.11	7.4	7.7	336.1	324.9	314.1	303.7
55	87.3	84.4	87.1	73.0	0.28	0.25	-0.09	-0.10	7.4	8.2	322.7	313.7	312.3	303.7
Avg.	87.6	84.8	87.2	74.1	-0.15	-0.13	-0.02	0.01	7.7	7.7	321.8	322.5	303.2	303.7
Std Dv	0.4	0.5	0.5	0.9	0.35	0.32	0.08	0.09	0.3	0.4	25.0	27.3	7.9	0.0

TABLE NO. B.2-2.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/19/81

CORRECTION DATA

SITE: 6   SIDELINE - 284 M. NORTH   JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
21	83.6	82.1	82.2	70.5	-0.29	-0.15	-0.05	-0.05	7.9	8.0	353.8	348.7	326.3	321.5
22	84.1	82.1	84.0	71.6	-0.15	-0.17	-0.03	-0.03	7.7	7.6	329.3	326.6	324.1	321.5
23	80.7	79.4	79.6	68.3	-2.20	-1.92	0.52	0.51	7.4	7.3	279.3	328.1	273.7	321.5
24	82.0	79.9	81.1	68.8	-1.36	-1.29	0.33	0.33	7.7	7.8	329.7	364.0	291.3	321.5
Avs.	82.6	80.9	81.7	69.8	-1.00	-0.88	0.19	0.19	7.7	7.7	323.0	341.8	303.8	321.5
Std Dv	1.9	1.8	2.3	1.9	1.18	1.07	0.34	0.34	0.3	0.3	38.4	21.9	31.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
29	83.3	81.3	83.3	71.3	-0.29	-0.29	0.01	0.01	7.6	7.6	320.5	321.6	320.4	321.5
30	83.4	81.6	83.8	71.8	-0.96	-0.91	0.21	0.21	7.4	7.5	301.7	322.3	301.0	321.5
31	82.8	81.0	82.9	71.2	-0.30	-0.29	0.01	0.01	7.3	7.4	324.0	325.1	320.4	321.5
32	84.6	82.6	84.5	73.2	0.24	0.22	-0.16	-0.15	7.7	7.4	359.5	343.4	336.7	321.5
Avs.	83.5	81.6	83.6	71.9	-0.33	-0.32	0.02	0.02	7.5	7.5	326.4	328.1	319.6	321.5
Std Dv	0.9	0.9	0.8	1.1	0.60	0.57	0.19	0.18	0.2	0.1	29.6	12.6	17.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
49	86.1	84.5	88.1	76.2	-0.24	-0.19	0.03	0.03	7.1	7.2	330.7	334.0	318.4	321.5
50	84.7	82.6	86.3	74.0	-0.10	-0.07	0.00	0.00	7.1	7.1	322.1	322.0	321.6	321.5
51	86.7	84.9	87.5	75.6	-0.27	-0.26	0.06	0.06	7.3	7.3	323.0	329.1	315.6	321.5
52	84.5	82.6	85.3	73.7	0.17	0.17	-0.07	-0.07	7.4	7.3	365.7	357.7	328.7	321.5
Avs.	85.5	83.7	86.8	74.9	-0.11	-0.09	0.00	0.00	7.2	7.2	335.4	335.7	321.0	321.5
Std Dv	1.3	1.5	1.5	1.5	0.25	0.23	0.07	0.07	0.2	0.1	25.2	19.0	6.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
17	84.6	82.4	84.8	72.9	-1.31	-1.24	0.32	0.31	7.6	7.4	293.7	323.3	292.1	321.5
18	87.4	85.7	89.4	78.4	-0.54	-0.56	0.06	0.06	6.9	6.6	395.3	403.4	315.0	321.5
19	85.6	83.7	86.9	75.0	-0.81	-0.62	0.09	0.10	7.1	7.2	328.9	339.1	311.9	321.5
20	86.6	85.2	89.3	78.0	-0.50	-0.43	0.03	0.03	6.5	6.5	370.0	373.5	318.5	321.5
Avs.	86.0	84.2	87.6	76.1	-0.75	-0.71	0.12	0.12	7.0	6.9	347.0	359.8	309.4	321.5
Std Dv	1.5	1.8	2.7	3.2	0.46	0.44	0.16	0.16	0.5	0.6	54.9	43.9	14.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
25	88.7	85.9	90.7	78.1	0.56	0.55	-0.24	-0.25	7.1	7.3	348.6	322.3	347.8	321.5
26	87.8	85.6	90.0	77.7	-1.20	-1.14	0.28	0.27	7.1	6.9	297.0	325.0	293.9	321.5
27	89.1	85.6	90.9	77.5	-1.06	-1.04	0.23	0.22	7.2	7.1	335.8	361.0	299.1	321.5
28	88.3	86.3	90.6	78.8	-1.26	-1.19	0.30	0.28	7.3	6.9	300.7	330.2	292.9	321.5
Avs.	88.5	85.8	90.6	78.0	-0.74	-0.70	0.14	0.13	7.2	7.0	320.5	334.6	308.4	321.5
Std Dv	0.7	0.4	0.5	0.7	1.07	1.03	0.31	0.31	0.1	0.2	31.4	21.9	32.3	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.2-3.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/19/81

CORRECTION DATA

SITE: 6 SIDELINE - 284 M. NORTH JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
9	87.2	85.3	88.8	76.8	0.09	0.05	-0.10	-0.09	7.6	7.4	310.2	301.3	306.6	297.8
10	88.0	86.4	90.5	80.0	0.04	0.03	-0.11	-0.10	6.9	6.3	438.1	421.9	309.1	297.8
15	86.3	84.1	87.9	76.2	-0.27	-0.28	0.01	0.01	7.1	6.9	297.3	298.0	297.0	297.8
16	87.2	85.5	90.5	78.7	-0.59	-0.56	0.07	0.07	6.4	6.4	327.5	336.0	290.2	297.8
Avs.	87.2	85.3	89.4	77.9	-0.18	-0.19	-0.03	-0.03	7.0	6.7	343.3	339.3	300.8	297.8
Std Dv	0.9	1.1	1.6	2.1	0.39	0.35	0.11	0.10	0.6	0.6	78.9	70.7	10.7	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
7	86.0	83.9	86.5	74.1	0.03	0.11	-0.14	-0.14	7.6	7.8	410.5	393.6	369.6	354.3
8	84.2	82.8	85.3	73.6	-1.53	-1.48	0.33	0.33	7.3	7.3	420.1	465.6	319.7	354.3
13	86.2	84.0	87.0	74.8	-0.18	-0.22	-0.03	-0.03	7.6	7.5	401.6	397.7	357.8	354.3
14	-	83.6	85.5	74.9	-1.38	-1.29	-	0.33	-	7.6	325.3	359.4	320.7	354.3
Avs.	85.5	83.6	86.1	74.4	-0.76	-0.72	0.05	0.12	7.5	7.6	389.4	404.0	342.0	354.3
Std Dv	1.6	0.7	1.0	0.7	0.98	0.96	0.35	0.30	0.2	0.2	53.1	54.5	31.3	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
45	84.5	82.8	85.2	74.0	0.04	0.04	-0.05	-0.04	7.5	7.2	505.9	498.8	421.4	415.6
46	84.9	82.7	86.2	73.0	0.32	0.29	-0.11	-0.12	7.0	7.4	482.5	465.1	431.1	415.6
47	85.4	83.8	86.1	74.3	0.03	0.02	-0.04	-0.04	7.5	7.6	582.6	575.1	420.9	415.6
48	84.7	82.2	86.4	72.4	-0.37	-0.37	0.07	0.08	6.8	7.5	485.0	496.6	405.9	415.6
1											NO TRACKING DATA			
2											NO TRACKING DATA			
3											NO TRACKING DATA			
4											NO TRACKING DATA			
Avs.	84.9	82.9	86.0	73.4	0.00	-0.01	-0.03	-0.03	7.2	7.4	514.0	508.9	419.8	415.6
Std Dv	0.5	0.9	0.7	1.1	0.35	0.33	0.09	0.10	0.4	0.2	57.4	57.3	12.8	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	81.9	80.1	80.9	69.2	-0.25	-0.27	-0.04	-0.04	7.9	7.5	674.1	665.4	544.0	537.1
6	82.3	80.8	82.9	71.6	-0.25	-0.16	-0.10	-0.09	7.2	7.1	655.7	636.0	553.7	537.1
11											NO TRACKING DATA			
12	81.3	79.8	81.5	68.9	-1.34	-1.29	0.18	0.19	7.6	8.3	864.9	913.0	508.8	537.1
Avs.	81.9	80.2	81.8	69.9	-0.61	-0.57	0.01	0.02	7.6	7.6	731.5	738.1	535.5	537.1
Std Dv	0.7	0.7	1.4	2.1	0.89	0.88	0.21	0.21	0.4	0.8	163.9	215.2	33.4	0.0

TABLE NO. B.2-4.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/19/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 6 SIDELINE - 284 M. NORTH JUNE 23,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
69	87.5	85.4	88.1	76.7	-0.34	-0.31	0.09	0.08	7.0	6.5	467.2	481.3	298.4	307.4
70	87.1	85.3	89.6	77.2	0.19	0.17	-0.04	-0.04	5.4	5.8	334.4	328.7	312.7	307.4
Avs.	87.3	85.3	88.9	77.0	-0.07	-0.07	0.02	0.02	6.2	6.1	400.8	405.0	305.6	307.4
Std Dv	0.3	0.1	1.1	0.3	0.37	0.34	0.09	0.08	1.1	0.5	93.9	107.9	10.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 93 KTS														
61	85.7	83.9	85.0	73.6	0.51	0.49	-0.14	-0.14	7.7	7.3	616.3	590.4	335.6	321.5
62	83.6	81.7	82.8	70.9	-0.30	-0.28	0.08	0.08	7.1	7.0	316.0	324.2	313.4	321.5
63	84.6	82.9	84.4	72.2	0.27	0.26	-0.08	-0.08	7.7	7.9	552.5	540.0	329.0	321.5
64	83.2	81.2	82.0	70.2	0.03	0.02	-0.01	-0.01	7.9	7.7	354.1	353.3	322.3	321.5
Avs.	84.3	82.4	83.5	71.7	0.13	0.12	-0.04	-0.04	7.6	7.5	459.7	452.0	325.1	321.5
Std Dv	1.4	1.5	1.7	1.8	0.42	0.40	0.12	0.12	0.4	0.5	180.2	162.7	11.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
57	88.4	86.6	89.5	77.3	0.30	0.28	-0.09	-0.10	7.4	7.8	366.9	356.6	330.8	321.5
58	87.4	84.8	89.1	76.7	0.36	0.31	-0.09	-0.09	7.1	7.0	343.6	333.7	331.1	321.5
59	88.9	87.0	90.6	78.8	0.16	0.14	-0.04	-0.05	6.9	7.4	370.2	364.8	326.3	321.5
60	86.8	84.1	87.7	75.4	0.00	0.00	0.00	0.00	7.7	7.2	343.6	343.4	321.7	321.5
Avs.	87.9	85.6	89.2	77.0	0.20	0.18	-0.05	-0.06	7.3	7.4	356.1	349.6	327.5	321.5
Std Dv	1.2	1.7	1.5	1.8	0.20	0.17	0.05	0.06	0.4	0.4	17.7	16.9	5.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 155 KTS														
65	90.8	88.5	93.5	80.8	-0.02	-0.03	0.01	0.01	6.6	7.1	332.3	333.1	320.7	321.5
66	89.1	85.6	90.5	78.3	-0.35	-0.35	0.10	0.09	6.9	6.6	366.9	379.0	311.3	321.5
67	90.7	88.1	92.4	79.9	-0.04	-0.04	0.01	0.01	6.9	7.3	333.0	334.3	320.3	321.5
68	-	86.2	91.4	78.6	0.27	0.23	-	-0.07	-	7.1	349.3	341.8	328.6	321.5
Avs.	90.2	87.1	91.9	79.4	-0.03	-0.05	0.04	0.01	6.8	7.0	345.4	347.0	320.2	321.5
Std Dv	1.4	1.7	1.6	1.4	0.31	0.29	0.07	0.08	0.2	0.4	20.1	26.5	8.7	0.0

TABLE NO. B.3-1.1

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/19/81

CORRECTION DATA

SITE: 1 CENTERLINE - CENTER JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
24	99.4	97.5	102.0	89.8	0.45	0.44	-0.14	-0.14	6.1	6.4	145.4	138.1	124.5	118.2
26	100.1	98.1	101.3	88.8	2.05	1.97	-0.67	-0.66	7.1	7.0	171.0	137.8	146.8	118.2
28	99.1	97.1	101.1	88.8	0.08	0.08	-0.04	-0.04	7.0	7.1	139.3	137.5	119.7	118.2
32	98.8	96.4	99.2	87.0	-0.09	-0.08	0.02	0.02	7.8	7.1	148.1	148.9	117.6	118.2
34	99.2	96.8	100.9	87.7	0.09	0.09	-0.03	-0.04	6.6	7.2	123.6	122.1	119.7	118.2
36	98.4	96.2	99.5	87.6	0.82	0.78	-0.28	-0.27	7.5	7.2	198.3	181.9	128.9	118.2
38	98.4	95.8	100.8	88.3	-0.05	-0.03	0.00	0.00	6.5	6.4	194.5	194.4	118.2	118.2
40	98.5	96.2	101.1	88.5	-0.08	-0.06	0.01	0.01	6.9	7.1	144.8	145.5	117.7	118.2
64	96.7	94.0	100.1	87.2	-0.32	-0.30	0.09	0.09	6.3	6.5	124.9	129.0	114.4	118.2
Avg.	98.8	96.4	100.7	88.2	0.33	0.32	-0.12	-0.11	6.9	6.9	154.4	148.4	123.1	118.2
Std Dv	1.0	1.2	1.0	1.0	0.78	0.74	0.25	0.25	0.6	0.4	29.5	25.8	10.5	0.0
TAKEOFF														
23											NO TRACKING DATA			
25	91.6	88.1	94.9	81.4	-5.92	-5.54	1.47	1.49	5.9	6.0	83.9	148.9	77.1	136.9
27	91.4	88.3	94.9	82.1	-6.43	-5.97	1.57	1.50	5.8	5.6	82.9	154.8	73.4	136.9
29	90.8	87.7	93.6	80.2	-5.46	-5.08	1.45	1.46	6.4	6.5	94.4	158.8	81.4	136.9
31	89.7	86.9	92.9	80.0	-4.79	-4.43	1.27	1.25	6.3	6.2	99.5	158.1	86.2	136.9
33	91.1	87.8	95.0	81.3	-4.49	-4.17	1.11	1.12	5.9	6.0	98.6	152.0	88.8	136.9
35	90.7	87.6	94.5	81.2	-5.21	-4.81	1.36	1.32	6.2	6.1	101.1	166.9	82.9	136.9
37	90.4	87.2	93.1	79.9	-4.91	-4.56	1.36	1.33	6.6	6.4	93.2	150.2	85.0	136.9
39											NO TRACKING DATA			
41	90.1	86.8	93.6	80.2	-4.82	-4.45	1.24	1.19	6.2	6.0	107.1	169.1	86.7	136.9
Avg.	90.7	87.6	94.1	80.8	-5.25	-4.88	1.35	1.33	6.2	6.1	95.1	157.3	82.7	136.9
Std Dv	0.7	0.6	0.9	0.9	0.70	0.67	0.16	0.15	0.3	0.3	9.0	8.1	5.6	0.0

TABLE NO. B.3-2.1

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/19/81

CORRECTION DATA

SITE: 1 CENTERLINE - CENTER JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS														
21	89.7	86.3	92.7	77.8	0.50	0.48	-0.16	-0.19	6.2	7.1	583.6	548.9	160.7	151.2
22	89.5	86.4	92.9	78.2	0.57	0.56	-0.16	-0.18	5.6	6.3	181.7	170.2	161.4	151.2
46	89.3	85.9	92.8	78.5	0.41	0.39	-0.11	-0.12	5.9	6.5	175.8	168.3	157.9	151.2
47	89.6	86.6	92.6	77.5	1.24	1.18	-0.35	-0.40	6.5	7.4	185.5	163.7	171.3	151.2
Avs.	89.5	86.3	92.8	78.0	0.68	0.65	-0.19	-0.22	6.0	6.8	281.6	262.8	162.8	151.2
Std Dv	0.2	0.3	0.2	0.5	0.46	0.44	0.13	0.15	0.5	0.6	246.6	233.7	7.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS														
51	90.4	87.1	93.4	79.3	1.60	1.49	-0.47	-0.49	6.7	7.0	198.1	168.7	177.5	151.2
52	90.3	87.1	92.6	78.6	0.33	0.31	-0.10	-0.10	7.0	6.9	170.9	165.1	156.5	151.2
53	90.2	86.9	93.1	79.0	1.45	1.35	-0.42	-0.45	6.6	7.2	197.5	170.8	174.9	151.2
56	90.7	87.6	93.2	78.7	0.35	0.33	-0.10	-0.10	6.5	6.6	182.4	175.9	156.8	151.2
Avs.	90.4	87.2	93.1	78.9	0.93	0.87	-0.27	-0.28	6.7	6.9	187.2	170.1	166.4	151.2
Std Dv	0.3	0.4	0.4	0.4	0.84	0.78	0.25	0.26	0.2	0.3	16.0	5.5	13.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS														
54	91.7	88.3	93.9	79.7	0.36	0.34	-0.11	-0.12	6.9	7.5	177.7	171.3	156.9	151.2
55	91.7	88.6	93.4	79.7	0.73	0.69	-0.22	-0.23	6.7	7.0	189.4	175.8	162.9	151.2
57	91.1	87.9	92.6	79.0	1.23	1.16	-0.40	-0.40	7.5	7.5	200.6	177.4	170.9	151.2
58	90.7	87.4	92.9	78.5	0.35	0.33	-0.11	-0.12	6.8	7.4	187.2	180.6	156.7	151.2
Avs.	91.3	88.0	93.2	79.2	0.67	0.63	-0.21	-0.22	7.0	7.3	188.7	176.3	161.8	151.2
Std Dv	0.6	0.6	0.7	0.8	0.51	0.48	0.17	0.16	0.5	0.3	11.5	4.7	8.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
17	92.8	89.3	95.5	81.8	1.37	1.29	-0.41	-0.41	6.8	6.7	523.8	455.4	173.9	151.2
18	92.8	89.5	94.3	81.0	0.96	0.92	-0.33	-0.33	7.3	7.2	330.2	297.5	167.8	151.2
19	92.8	89.3	95.7	82.4	0.72	0.70	-0.26	-0.24	7.3	6.9	256.8	236.7	164.0	151.2
20											NO TRACKING DATA			
62	92.4	89.1	94.4	81.0	0.00	0.00	-0.01	-0.01	7.3	7.3	275.3	274.7	151.5	151.2
63	92.8	89.5	95.2	81.9	1.28	1.20	-0.40	-0.40	7.5	7.5	305.9	270.7	170.8	151.2
Avs.	92.7	89.3	95.0	81.6	0.87	0.82	-0.28	-0.28	7.2	7.1	338.4	307.0	165.6	151.2
Std Dv	0.2	0.2	0.7	0.7	0.63	0.60	0.19	0.19	0.3	0.4	124.0	99.0	10.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS														
48											NO TRACKING DATA			
49	95.5	91.7	98.0	83.7	1.09	1.01	-0.32	-0.33	7.3	7.6	453.8	410.8	167.0	151.2
50	95.3	91.7	98.4	84.7	-0.72	-0.68	0.20	0.20	6.9	6.7	285.1	304.9	141.4	151.2
59	95.1	91.6	98.5	84.6	-0.24	-0.22	0.06	0.06	6.7	7.1	437.1	445.5	148.3	151.2
60	94.8	91.1	96.7	83.1	0.44	0.42	-0.14	-0.14	7.3	7.2	324.6	310.8	157.9	151.2
61	93.9	90.5	96.5	82.6	-0.04	-0.04	0.00	0.00	7.2	7.3	444.6	445.1	151.0	151.2
Avs.	94.9	91.3	97.6	83.7	0.11	0.10	-0.04	-0.04	7.1	7.2	389.0	383.4	153.1	151.2
Std Dv	0.7	0.6	1.1	1.1	0.80	0.74	0.23	0.23	0.3	0.3	90.5	81.4	11.3	0.0

TABLE NO. B.3-3.1

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/19/81

CORRECTION DATA

SITE: 1 CENTERLINE - CENTER JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
9	95.0	91.7	98.8	85.7	1.19	1.16	-0.39	-0.37	6.8	6.5	160.9	141.2	102.9	90.2
10	95.5	92.1	98.3	84.8	1.04	1.01	-0.38	-0.37	7.7	7.5	153.1	136.5	101.2	90.2
15	96.9	93.7	99.9	86.6	0.85	0.82	-0.27	-0.27	6.6	6.6	336.7	306.4	99.1	90.2
16	97.1	94.1	99.8	86.4	0.36	0.36	-0.15	-0.14	7.6	7.1	109.2	104.4	94.4	90.2
Avg.	96.1	92.9	99.2	85.9	0.86	0.84	-0.30	-0.29	7.1	6.9	190.0	172.1	99.4	90.2
Std Dv	1.2	1.4	1.0	1.0	0.44	0.43	0.14	0.13	0.7	0.6	123.0	111.5	4.5	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
7											NO TRACKING DATA			
8	89.9	87.1	90.3	76.9	0.24	0.25	-0.11	-0.12	7.2	7.7	244.4	235.6	220.0	212.1
13	91.6	88.8	92.9	80.4	0.04	0.06	-0.09	-0.09	7.6	7.2	686.9	667.6	218.3	212.1
14	91.6	88.7	92.1	79.2	0.23	0.23	-0.13	-0.12	7.5	7.3	386.2	371.6	220.5	212.1
Avg.	91.0	88.2	91.8	78.8	0.17	0.18	-0.11	-0.11	7.4	7.4	439.1	424.9	219.6	212.1
Std Dv	1.4	1.4	1.8	2.6	0.16	0.15	0.03	0.02	0.3	0.3	319.6	312.4	1.6	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
2	88.2	85.3	88.3	75.2	0.15	0.18	-0.13	-0.12	7.3	7.1	554.1	532.6	315.9	303.6
3	88.3	85.0	88.6	75.2	0.67	0.66	-0.29	-0.29	7.8	7.8	563.2	517.7	330.2	303.6
4	87.9	85.1	88.1	74.2	-0.18	-0.14	0.00	0.00	7.0	7.6	330.1	329.9	303.8	303.6
42	88.0	85.0	88.7	76.1	0.08	0.09	-0.04	-0.04	6.9	6.6	501.2	493.9	308.1	303.6
43	88.4	85.4	89.0	76.2	0.44	0.42	-0.14	-0.13	7.1	6.8	816.7	781.5	317.2	303.6
44	87.1	84.2	86.7	73.6	0.09	0.10	-0.05	-0.05	7.6	7.6	483.6	476.5	308.1	303.6
45	88.4	85.2	89.2	75.9	0.47	0.45	-0.14	-0.14	6.9	7.0	764.6	730.4	317.8	303.6
Avg.	88.0	85.0	88.4	75.2	0.25	0.25	-0.11	-0.11	7.2	7.2	573.3	551.8	314.4	303.6
Std Dv	0.5	0.4	0.9	1.1	0.32	0.30	0.11	0.10	0.4	0.5	183.7	170.0	9.6	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
5	84.3	81.4	84.4	70.3	0.76	0.74	-0.28	-0.30	7.1	7.6	563.3	514.6	499.1	456.0
6	85.8	82.9	84.6	[illegible]	0.31	0.32	-0.18	-0.17	7.9	7.7	527.8	501.5	479.8	456.0
11	85.5	82.9	84.7	[illegible]	0.70	0.68	-0.28	-0.28	7.5	7.4	998.4	916.3	496.8	456.0
12											NO TRACKING DATA			
Avg.	85.2	82.4	84.6	71.3	0.59	0.58	-0.25	-0.25	7.5	7.6	696.5	644.1	491.9	456.0
Std Dv	1.1	1.2	0.2	1.3	0.35	0.32	0.08	0.10	0.6	0.2	214.9	333.4	14.9	0.0

TABLE NO. 8.3-1.18

AUGUSTA A-109 HELICOPTER (ITALIAN)

CORRECTION DATA

DOT/TSC
12/21/81

[illegible]   CENTERLINE - CENTER (FLUSH)   [illegible]

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
24	103.3	101.6	105.7	93.9	0.44	0.44	-0.14	-0.14	6.3	6.4	146.5	139.2	125.7	119.4
26	103.6	101.7	104.1	92.9	2.05	1.98	-0.66	-0.68	7.1	7.3	211.2	170.5	148.0	119.4
28	102.4	100.8	104.3	92.7	0.08	0.08	-0.04	-0.04	7.2	7.3	140.5	138.8	120.9	119.4
32	101.8	100.0	102.4	90.9	-0.13	-0.12	0.02	0.02	7.2	7.1	222.0	223.2	118.8	119.4
34	102.2	100.6	103.4	91.7	0.09	0.09	-0.04	-0.04	7.0	7.1	129.7	128.1	120.9	119.4
36	101.7	100.0	103.4	91.2	0.80	0.78	-0.26	-0.27	6.9	7.4	186.6	171.2	130.1	119.4
38	101.2	99.4	102.4	91.3	-0.05	-0.04	0.00	0.00	7.5	6.9	195.3	195.2	119.5	119.4
40	102.3	100.5	104.8	92.6	-0.07	-0.06	0.01	0.01	7.2	7.5	145.9	146.5	118.9	119.4
64	99.9	97.8	103.0	91.5	-0.31	-0.30	0.09	0.09	6.5	6.4	120.4	124.4	115.7	119.4
Avg.	102.1	100.3	103.7	92.1	0.32	0.32	-0.11	-0.12	7.0	7.0	166.5	159.7	124.3	119.4
Std Dv	1.2	1.3	1.2	1.1	0.78	0.75	0.24	0.25	0.4	0.4	40.2	35.5	10.5	0.0
TAKEOFF														
23											NO TRACKING DATA			
25	95.2	92.1	98.7	85.3	-5.86	-5.45	1.49	1.50	6.1	6.1	96.4	170.0	78.3	138.1
27	95.6	92.5	99.4	86.2	-6.27	-5.83	1.55	1.56	5.8	5.8	83.9	155.5	74.6	138.1
29	94.8	91.7	97.1	83.9	-5.42	-4.99	1.48	1.51	6.6	6.7	109.8	183.6	82.6	138.1
31	94.4	91.4	98.2	84.8	-4.74	-4.38	1.19	1.21	6.0	6.1	100.4	158.7	87.4	138.1
33	94.8	91.9	98.7	85.0	-4.41	-4.08	1.11	1.15	6.0	6.2	99.8	153.1	90.0	138.1
35	94.9	91.9	98.5	85.6	-4.96	-4.66	1.35	1.30	6.2	6.0	91.3	149.9	84.1	138.1
37	94.4	91.3	97.7	84.3	-4.83	-4.54	1.31	1.30	6.4	6.3	105.0	168.2	86.2	138.1
39											NO TRACKING DATA			
41	94.0	90.9	97.8	84.2	-4.72	-4.38	1.20	1.19	6.1	6.1	108.0	169.6	87.9	138.1
Avg.	94.8	91.7	98.3	84.9	-5.15	-4.79	1.33	1.34	6.2	6.2	99.3	163.6	83.9	138.1
Std Dv	0.5	0.6	0.8	0.8	0.69	0.64	0.17	0.17	0.3	0.3	9.4	12.2	5.6	0.0

TABLE NO. B.3-2.1G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS														
21	93.1	89.7	95.5	82.0	0.48	0.47	-0.17	-0.17	6.6	6.6	614.8	578.6	161.9	152.4
22	93.0	89.7	95.2	81.1	0.57	0.55	-0.18	-0.18	6.4	6.6	182.8	171.3	162.6	152.4
46	92.8	89.6	95.1	81.8	0.40	0.39	-0.13	-0.13	6.7	6.7	203.5	194.9	159.1	152.4
47	92.8	89.9	94.7	80.8	1.22	1.15	-0.36	-0.40	6.8	7.4	197.1	174.1	172.5	152.4
Avg.	92.9	89.7	95.1	81.4	0.67	0.64	-0.21	-0.22	6.6	6.8	299.5	279.7	164.0	152.4
Std Dv	0.2	0.2	0.4	0.7	0.46	0.42	0.13	0.15	0.2	0.4	257.6	244.3	7.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS														
51	94.0	90.9	96.8	83.6	1.58	1.49	-0.47	-0.48	6.8	6.9	199.1	169.8	178.7	152.4
52	93.5	90.4	95.9	82.3	0.32	0.31	-0.10	-0.10	6.9	6.7	202.7	195.9	157.7	152.4
53	93.3	90.0	96.2	82.8	1.43	1.36	-0.41	-0.41	6.5	6.6	233.9	202.4	176.1	152.4
56	93.7	90.4	96.2	82.7	0.34	0.33	-0.10	-0.10	6.2	6.3	201.5	194.4	158.0	152.4
Avg.	93.6	90.4	96.3	82.8	0.92	0.87	-0.27	-0.27	6.6	6.6	209.3	190.6	167.6	152.4
Std Dv	0.4	0.5	0.4	0.7	0.83	0.78	0.24	0.25	0.4	0.3	20.1	17.5	13.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS														
54											NO TRACKING DATA			
55	94.1	91.0	96.2	82.9	0.72	0.69	-0.23	-0.23	7.2	7.2	210.5	195.5	164.1	152.4
57	93.9	90.6	96.3	82.9	1.24	1.17	-0.36	-0.36	6.8	6.9	275.2	243.6	172.1	152.4
58	93.7	90.5	95.8	81.4	0.35	0.33	-0.11	-0.11	6.9	7.4	255.3	246.4	157.9	152.4
Avg.	93.9	90.7	96.1	82.4	0.77	0.73	-0.23	-0.23	7.0	7.2	247.0	228.5	164.7	152.4
Std Dv	0.3	0.4	0.4	1.2	0.63	0.60	0.18	0.18	0.3	0.4	46.9	40.5	10.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
17	96.6	93.2	99.1	86.0	1.33	1.26	-0.42	-0.40	7.0	6.7	275.0	239.3	175.1	152.4
18	96.2	93.0	98.7	84.4	0.96	0.91	-0.30	-0.32	6.6	7.1	268.1	241.8	169.0	152.4
19	96.7	93.4	99.7	86.7	0.72	0.69	-0.25	-0.24	7.2	6.8	257.5	237.5	165.2	152.4
20											NO TRACKING DATA			
62	95.3	92.1	98.2	84.2	0.00	0.00	-0.01	-0.01	6.6	7.1	242.3	241.8	152.7	152.4
63	95.6	92.6	98.3	85.6	1.25	1.19	-0.38	-0.37	7.3	7.0	271.8	240.8	172.0	152.4
Avg.	96.1	92.9	98.8	85.4	0.85	0.81	-0.27	-0.27	6.9	6.9	262.9	240.2	166.8	152.4
Std Dv	0.7	0.6	0.7	1.2	0.62	0.59	0.19	0.18	0.4	0.2	15.3	2.1	10.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS														
48	98.9	95.4	101.8	87.7	-0.41	-0.34	0.09	0.10	7.1	7.5	305.2	314.4	147.9	152.4
49	98.7	95.2	101.2	87.6	1.04	1.02	-0.32	-0.31	7.4	7.3	408.1	369.7	168.2	152.4
50	98.6	95.1	102.1	88.3	-0.73	-0.69	0.19	0.20	6.6	6.9	286.3	306.0	142.6	152.4
59	98.1	94.7	101.4	87.6	-0.27	-0.23	0.06	0.06	6.9	7.2	345.9	352.5	149.6	152.4
60	97.6	94.0	100.4	86.6	0.43	0.42	-0.14	-0.14	7.4	7.2	285.7	273.6	159.1	152.4
61	97.5	94.2	99.8	86.9	-0.04	-0.04	0.00	0.00	7.3	6.8	354.8	355.2	152.2	152.4
Avg.	98.2	94.8	101.1	87.5	0.00	0.02	-0.02	-0.01	7.1	7.2	331.0	328.6	153.3	152.4
Std Dv	0.6	0.6	1.0	0.7	0.71	0.68	0.20	0.20	0.3	0.3	53.5	41.0	10.2	0.0

TABLE NO. B.3-3.1G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 1G   CENTERLINE - CENTER (FLUSH)   JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
9	98.9	95.5	103.0	90.1	1.18	1.14	-0.36	-0.33	6.4	5.9	162.3	142.5	104.1	91.4
10	99.2	95.6	103.2	89.3	1.02	1.00	-0.33	-0.34	6.7	6.8	154.4	137.8	102.4	91.4
15	99.3	95.8	103.3	90.1	0.83	0.81	-0.28	-0.27	7.0	6.7	141.7	129.1	100.4	91.4
16	99.3	95.8	103.1	89.6	0.35	0.34	-0.13	-0.13	6.8	6.6	161.6	154.6	95.6	91.4
Avs.	99.2	95.7	103.1	89.7	0.85	0.82	-0.27	-0.27	6.7	6.5	155.0	141.0	100.6	91.4
Std Dv	0.2	0.2	0.2	0.5	0.44	0.43	0.13	0.12	0.3	0.5	11.7	13.0	4.5	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
7											NO TRACKING DATA			
8	93.4	90.4	94.4	81.1	0.22	0.22	-0.11	-0.11	7.1	7.3	351.8	339.2	221.2	213.4
13	94.3	91.2	96.1	83.2	0.13	0.13	-0.09	-0.09	7.3	7.1	348.1	338.4	219.5	213.4
14	93.8	90.7	95.6	81.8	0.25	0.24	-0.11	-0.12	6.9	7.3	330.4	318.0	221.7	213.4
Avs.	93.8	90.8	95.4	82.0	0.20	0.20	-0.10	-0.11	7.1	7.2	343.4	331.9	220.8	213.4
Std Dv	0.6	0.6	1.2	1.5	0.09	0.08	0.02	0.02	0.3	0.2	16.1	17.0	1.6	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
1											NO TRACKING DATA			
2	91.8	88.7	92.3	78.9	0.24	0.25	-0.12	-0.12	6.9	7.1	321.0	308.5	317.1	304.8
3	91.8	88.7	92.3	79.3	0.69	0.66	-0.29	-0.28	7.9	7.6	425.6	391.5	331.4	304.8
4	91.5	88.6	91.2	77.9	-0.25	-0.21	0.00	0.00	7.3	7.4	503.4	503.1	305.0	304.8
42	91.1	88.3	92.5	79.8	0.09	0.09	-0.04	-0.04	6.6	6.4	472.1	465.3	309.3	304.8
43	91.9	88.8	92.8	79.4	0.44	0.42	-0.13	-0.15	6.9	7.6	817.1	782.1	318.5	304.8
44	90.6	87.8	91.6	78.1	0.10	0.10	-0.04	-0.05	6.8	7.1	484.3	477.2	309.3	304.8
45	91.6	88.6	92.8	80.0	0.45	0.43	-0.13	-0.14	6.7	6.9	498.2	476.0	319.0	304.8
Avs.	91.5	88.5	92.2	79.0	0.25	0.25	-0.11	-0.11	7.0	7.2	503.1	486.2	315.7	304.8
Std Dv	0.5	0.4	0.7	0.9	0.34	0.31	0.11	0.10	0.5	0.5	166.8	160.6	9.6	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
5	88.2	85.4	87.5	74.1	0.76	0.73	-0.30	-0.31	7.6	7.8	633.3	578.7	500.3	457.2
6	89.2	86.3	88.7	75.5	0.20	0.22	-0.16	-0.17	7.4	7.6	997.7	948.2	481.0	457.2
11	88.5	85.9	87.4	74.8	0.71	0.69	-0.29	-0.28	7.7	7.5	885.7	813.1	498.0	457.2
12											NO TRACKING DATA			
Avs.	88.6	85.9	87.9	74.8	0.56	0.55	-0.25	-0.25	7.6	7.6	838.9	780.0	493.1	457.2
Std Dv	0.7	0.6	1.1	1.0	0.44	0.40	0.11	0.10	0.2	0.2	210.9	264.4	14.9	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.3-1.1H

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 1H   CENTERLINE - CENTER (10-METER)   JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
24	97.6	95.8	100.5	88.5	0.48	0.47	-0.16	-0.15	6.6	6.2	137.0	129.7	115.7	109.5
26	97.9	95.9	99.0	87.3	2.28	2.17	-0.71	-0.70	7.1	6.9	203.0	161.0	138.1	109.5
28	96.1	94.2	98.4	86.4	0.09	0.09	-0.04	-0.04	7.0	7.1	130.9	129.1	111.0	109.5
32	96.6	94.6	97.4	85.1	-0.10	-0.09	0.02	0.02	7.2	7.3	116.2	117.0	108.8	109.5
34	96.5	94.7	97.9	85.5	0.09	0.09	-0.04	-0.04	7.2	7.2	119.6	118.1	110.9	109.5
36	96.4	94.2	97.8	85.4	0.89	0.85	-0.28	-0.29	7.0	7.3	178.1	162.3	120.2	109.5
38	96.2	94.0	98.2	86.3	-0.06	-0.05	0.00	0.00	6.9	6.6	188.2	188.3	109.4	109.5
40	96.6	94.4	99.3	86.8	-0.09	-0.08	0.02	0.02	7.1	7.3	136.5	137.2	108.9	109.5
64	93.7	91.2	97.0	84.4	-0.36	-0.34	0.10	0.10	6.5	6.7	116.0	120.2	105.7	109.5
Avs.	96.4	94.3	98.4	86.2	0.36	0.35	-0.12	-0.12	7.0	7.0	147.3	140.3	114.3	109.5
Std Dv	1.3	1.5	1.1	1.3	0.86	0.82	0.26	0.26	0.3	0.4	35.7	26.5	10.6	0.0
TAKEOFF														
23											NO TRACKING DATA			
25	89.4	85.2	93.1	78.7	-6.45	-6.03	1.63	1.65	5.9	6.0	76.0	142.7	68.3	128.3
27	90.7	86.7	94.3	80.4	-7.05	-6.61	1.77	1.70	5.9	5.7	75.5	149.9	64.6	128.3
29	90.0	85.9	93.7	79.2	-5.95	-5.59	1.45	1.49	5.9	6.0	87.1	153.9	72.6	128.3
31	89.9	85.7	93.7	79.2	-5.30	-4.96	1.32	1.27	6.0	5.8	91.9	152.3	77.4	128.3
33	90.6	86.4	94.0	79.9	-4.83	-4.54	1.33	1.25	6.5	6.1	83.0	132.9	80.2	128.3
35	90.3	86.1	93.8	79.8	-5.57	-5.26	1.52	1.45	6.4	6.1	82.5	142.6	74.2	128.3
37	90.1	85.9	93.1	78.7	-5.41	-5.08	1.51	1.43	6.7	6.3	85.5	143.9	76.2	128.3
39											NO TRACKING DATA			
41	89.6	85.4	93.7	79.1	-5.29	-4.95	1.29	1.29	5.9	6.0	100.4	165.3	78.0	128.3
Avs.	90.1	85.9	93.7	79.4	-5.73	-5.38	1.48	1.44	6.2	6.0	85.2	147.9	73.9	128.3
Std Dv	0.5	0.5	0.4	0.6	0.78	0.72	0.18	0.18	0.3	0.2	8.9	10.5	5.7	0.0

TABLE NO. B.3-2.1H

AUGUSTA A-109 HELICOPTER (ITALIAN)

CORRECTION DATA

DOT/TSC
12/21/81

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 24,1980

EV	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 97 KTS														
21	87.0	83.7	89.8	75.6	0.56	0.52	-0.18	-0.19	6.3	6.7	611.7	572.9	152.0	142.3
22	87.3	84.1	89.4	75.0	0.62	0.59	-0.19	-0.21	6.3	6.9	173.0	161.4	152.5	142.3
46	87.5	84.2	90.0	76.1	0.44	0.42	-0.13	-0.14	6.3	6.8	194.9	186.1	149.0	142.3
47	86.9	83.8	89.6	75.0	1.31	1.26	-0.38	-0.41	6.6	7.1	176.9	154.9	162.5	142.3
Avg.	87.2	83.9	89.7	75.4	0.73	0.70	-0.22	-0.24	6.4	6.9	289.1	268.8	154.0	142.3
Std Dv	0.3	0.3	0.3	0.7	0.48	0.47	0.13	0.15	0.2	0.2	263.7	248.8	7.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS														
51	87.5	84.4	90.6	76.7	1.70	1.59	-0.49	-0.51	6.6	6.9	226.1	190.8	168.7	142.3
52	87.6	84.5	90.1	76.1	0.35	0.33	-0.10	-0.11	6.4	6.7	194.3	187.4	147.6	142.3
53	87.6	84.2	90.5	76.2	1.54	1.45	-0.43	-0.48	6.5	7.2	225.7	193.5	166.0	142.3
56	87.7	84.4	89.8	76.1	0.37	0.36	-0.11	-0.12	6.6	7.0	192.5	185.2	147.9	142.3
Avg.	87.6	84.4	90.2	76.3	0.99	0.93	-0.28	-0.30	6.5	7.0	209.7	189.2	157.6	142.3
Std Dv	0.1	0.1	0.5	0.4	0.89	0.83	0.25	0.27	0.1	0.2	23.0	4.5	13.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS														
54	88.6	85.6	90.6	76.9	0.38	0.36	-0.12	-0.13	7.0	7.5	189.1	181.8	148.0	142.3
55	88.0	84.9	90.9	76.9	0.78	0.74	-0.23	-0.25	6.6	7.2	201.9	186.6	154.0	142.3
57	87.9	84.6	90.7	76.8	1.30	1.22	-0.38	-0.40	6.7	7.1	213.6	187.6	162.1	142.3
58	87.5	84.4	89.9	75.6	0.37	0.35	-0.11	-0.12	6.7	7.2	179.1	172.4	147.9	142.3
Avg.	88.0	84.9	90.5	76.6	0.71	0.67	-0.21	-0.22	6.7	7.2	195.9	182.1	153.0	142.3
Std Dv	0.5	0.6	0.5	0.8	0.54	0.50	0.15	0.16	0.2	0.2	18.4	8.5	8.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
17	90.4	87.1	94.0	81.0	1.50	1.42	-0.45	-0.45	7.0	6.9	565.3	487.4	165.1	142.3
18	89.9	86.9	91.5	78.4	1.04	0.98	-0.34	-0.35	7.2	7.3	261.0	233.7	159.0	142.3
19	90.2	87.1	92.8	79.2	0.78	0.75	-0.27	-0.28	7.3	7.5	217.1	199.1	155.2	142.3
20											NO TRACKING DATA			
62	88.6	85.7	90.4	77.2	0.00	0.01	-0.01	-0.01	7.5	7.6	234.9	234.4	142.7	142.3
63	89.6	86.6	91.9	78.7	1.32	1.26	-0.41	-0.43	7.4	7.6	231.5	203.4	162.0	142.3
Avg.	89.7	86.7	92.1	78.9	0.93	0.88	-0.30	-0.30	7.3	7.4	302.0	271.6	156.8	142.3
Std Dv	0.8	0.7	1.6	1.6	0.68	0.64	0.20	0.21	0.2	C.3	171.0	140.6	10.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS														
48											NO TRACKING DATA			
49	93.1	89.7	94.9	81.5	1.13	1.02	-0.36	-0.36	7.9	7.8	201.8	181.6	158.2	142.3
50	92.5	89.2	95.9	82.3	-0.79	-0.74	0.20	0.21	6.6	6.9	280.2	301.0	132.5	142.3
59	92.2	88.9	95.1	81.9	-0.27	-0.25	0.06	0.06	7.1	6.9	433.5	442.4	139.5	142.3
60	92.2	88.7	94.8	81.4	0.48	0.46	-0.15	-0.14	7.3	7.1	363.6	347.2	149.1	142.3
61	91.6	88.4	94.3	81.1	-0.05	-0.05	0.00	0.00	7.5	7.6	489.1	489.7	142.2	142.3
Avg.	92.3	89.0	95.0	81.6	0.10	0.09	-0.05	-0.05	7.3	7.3	353.7	352.4	144.3	142.3
Std Dv	0.6	0.6	0.7	0.5	0.85	0.78	0.25	0.25	0.6	0.5	133.3	140.0	11.3	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.3-3.1H

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 1H   CENTERLINE - CENTER (10-METER)   JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		TRACKING DATA (METERS) (REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
9	92.7	89.4	96.9	83.7	1.33	1.28	-0.41	-0.40	6.6	6.4	124.8	108.0	94.1	81.4
10											NO TRACKING DATA			
15	92.5	89.3	96.9	83.3	0.95	0.91	-0.30	-0.29	6.6	6.4	133.7	120.5	90.3	81.4
16	93.4	90.2	96.6	83.1	0.38	0.38	-0.16	-0.16	7.3	7.4	343.5	326.6	85.6	81.4
Avs.	92.9	89.6	96.8	83.4	0.89	0.86	-0.29	-0.28	6.8	6.7	200.7	185.0	90.0	81.4
Std Dv	0.7	0.7	0.2	0.4	0.68	0.64	0.18	0.17	0.6	0.8	175.0	173.6	6.0	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
7											NO TRACKING DATA			
8	87.6	85.1	88.2	74.8	0.24	0.25	-0.12	-0.12	7.3	7.5	272.1	261.9	211.2	203.3
13	87.5	84.6	89.2	75.7	0.17	0.17	-0.09	-0.10	7.2	7.5	274.5	266.4	209.5	203.3
14	87.7	85.0	88.5	75.0	0.27	0.27	-0.13	-0.13	7.5	7.7	350.8	337.0	211.6	203.3
Avs.	87.6	84.9	88.6	75.2	0.23	0.23	-0.11	-0.12	7.3	7.6	299.1	288.4	210.8	203.3
Std Dv	0.1	0.4	0.7	0.7	0.07	0.07	0.03	0.02	0.2	0.2	63.3	59.5	1.6	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
1											NO TRACKING DATA			
2	86.0	83.5	85.7	72.7	0.20	0.21	-0.13	-0.13	7.3	7.5	489.3	469.7	307.1	294.7
3	85.0	82.3	85.8	72.3	0.74	0.70	-0.28	-0.30	7.5	7.9	447.8	410.4	321.6	294.7
4	85.4	82.9	84.9	72.1	-0.25	-0.19	0.00	0.00	7.6	7.5	496.4	496.1	294.9	294.7
42	85.4	82.7	85.9	73.4	0.09	0.09	-0.05	-0.05	7.1	6.9	525.1	517.2	299.2	294.7
43	85.7	82.8	86.7	73.4	0.45	0.42	-0.14	-0.14	6.8	6.9	399.4	381.6	308.5	294.7
44	85.2	82.5	85.5	72.3	0.11	0.11	-0.05	-0.05	7.2	7.4	386.4	380.5	299.3	294.7
45	85.6	82.7	85.9	73.2	0.46	0.44	-0.15	-0.14	7.2	7.1	323.5	308.6	309.0	294.7
Avs.	85.5	82.8	85.8	72.8	0.26	0.25	-0.11	-0.12	7.3	7.3	438.3	423.4	305.7	294.7
Std Dv	0.3	0.4	0.6	0.6	0.35	0.32	0.10	0.11	0.3	0.4	78.7	81.4	9.7	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
5	82.0	79.3	81.0	67.8	0.75	0.73	-0.31	-0.32	7.8	7.9	1006.6	917.3	490.6	447.1
6	83.6	80.8	82.1	69.3	0.22	0.26	-0.17	-0.18	7.5	8.0	917.4	870.9	471.0	447.1
11	81.7	79.0	81.7	68.5	0.74	0.71	-0.27	-0.27	7.0	7.1	953.9	873.6	488.3	447.1
12											NO TRACKING DATA			
Avs.	82.5	79.7	81.6	68.5	0.57	0.57	-0.25	-0.26	7.4	7.6	959.3	887.3	483.3	447.1
Std Dv	1.5	1.4	0.8	1.1	0.43	0.38	0.10	0.10	0.6	0.7	41.9	36.8	15.2	0.0

TABLE NO. B.3-1.2

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/19/81

CORRECTION DATA

SITE: 2

CENTERLINE - 150 M. WEST

JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
24	101.1	98.8	103.1	91.0	0.13	0.13	-0.05	-0.05	6.9	6.7	131.9	129.6	104.4	102.6
26	101.7	99.4	105.0	92.0	1.83	1.77	-0.52	-0.56	6.1	6.6	140.1	115.1	124.8	102.6
28	101.2	99.0	104.1	91.1	-0.29	-0.27	0.07	0.08	6.4	6.9	112.7	115.8	99.9	102.6
32	101.2	98.6	101.7	89.8	0.01	0.02	-0.02	-0.02	7.8	7.2	198.0	196.9	103.2	102.6
34	101.4	99.1	103.6	91.2	-0.03	-0.02	0.00	0.00	6.9	7.0	131.9	131.8	102.6	102.6
36	99.7	97.3	103.0	90.0	0.39	0.38	-0.12	-0.12	6.1	6.5	115.5	110.5	107.2	102.6
38	100.9	98.2	103.0	90.2	-0.04	-0.03	0.00	0.00	6.9	6.9	122.9	123.0	102.5	102.6
40	100.4	98.1	103.5	91.0	-0.46	-0.44	0.12	0.13	6.2	6.3	116.3	121.8	98.0	102.6
64	98.4	95.8	101.0	86.9	-0.30	-0.28	0.09	0.08	6.7	6.3	129.3	133.2	99.5	102.6
Avs.	100.7	98.3	103.1	90.6	0.14	0.14	-0.05	-0.05	6.7	6.7	133.2	130.9	104.7	102.6
Std Dv	1.1	1.2	1.3	1.0	0.73	0.70	0.21	0.22	0.6	0.3	27.7	27.8	8.6	0.0
TAKEOFF														
23											NO TRACKING DATA			
25	93.6	89.7	97.3	83.2	-5.32	-5.05	1.45	1.41	6.2	6.0	65.4	112.1	59.2	101.4
27	94.1	90.5	98.6	84.7	-6.20	-5.86	1.47	1.50	5.4	5.6	64.6	120.6	54.4	101.4
29	93.2	89.6	97.4	83.6	-4.87	-4.60	1.21	1.21	5.7	5.7	66.1	108.0	62.1	101.4
31	93.1	89.5	97.7	83.6	-4.36	-4.14	1.05	1.05	5.5	5.5	69.9	108.6	65.3	101.4
33	93.1	89.7	97.3	83.7	-4.16	-3.90	1.10	1.03	6.0	5.6	69.3	105.3	66.7	101.4
35	93.0	89.5	97.2	83.4	-4.61	-4.40	1.16	1.15	5.6	5.6	63.7	102.2	63.2	101.4
37	93.4	89.8	97.7	83.5	-4.61	-4.36	1.13	1.17	5.6	5.8	71.8	114.1	63.8	101.4
39											NO TRACKING DATA			
41	92.9	89.3	97.1	82.9	-4.28	-4.05	1.12	1.11	6.1	6.0	76.8	117.7	66.2	101.4
Avs.	93.3	89.7	97.5	83.6	-4.80	-4.54	1.21	1.20	5.8	5.7	68.5	111.1	62.6	101.4
Std Dv	0.4	0.4	0.5	0.5	0.73	0.69	0.17	0.18	0.3	0.2	4.8	6.7	4.4	0.0

TABLE NO. B.3-2.2

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 2 CENTERLINE - 150 M. WEST JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS														
21	90.5	87.3	93.8	79.1	0.32	0.32	-0.12	-0.13	5.9	6.4	597.1	569.2	158.6	151.2
22	90.8	88.0	94.0	79.0	0.53	0.52	-0.16	-0.17	6.1	6.6	179.4	168.8	160.7	151.2
46	91.1	87.9	93.9	79.2	0.52	0.50	-0.15	-0.16	6.2	6.8	171.9	162.8	159.7	151.2
47	91.0	88.4	93.3	80.0	1.29	1.22	-0.39	-0.37	7.0	6.6	228.0	200.3	172.1	151.2
Avs.	90.9	87.9	93.8	79.3	0.66	0.64	-0.20	-0.21	6.3	6.6	294.1	275.2	162.8	151.2
Std Dv	0.3	0.5	0.4	0.6	0.52	0.49	0.15	0.13	0.6	0.2	249.2	240.8	7.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS														
51	91.2	88.1	93.2	79.2	1.39	1.31	-0.43	-0.43	7.1	7.1	181.6	157.9	173.9	151.2
52	90.9	87.5	95.2	81.3	0.48	0.45	-0.13	-0.13	5.9	6.2	178.6	170.0	158.8	151.2
53	90.7	87.6	92.7	78.9	1.34	1.25	-0.41	-0.42	7.1	7.1	191.5	167.4	173.0	151.2
56	90.9	87.7	94.5	79.5	0.33	0.31	-0.09	-0.10	6.0	6.6	174.7	168.9	156.4	151.2
Avs.	90.9	87.7	93.9	79.7	0.88	0.83	-0.26	-0.27	6.5	6.7	181.6	166.0	165.5	151.2
Std Dv	0.2	0.4	1.4	1.3	0.68	0.64	0.22	0.22	0.8	0.6	8.8	6.8	11.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS														
54	92.6	89.2	95.0	80.1	0.29	0.28	-0.08	-0.10	6.2	7.4	173.6	168.4	155.8	151.2
55	91.8	88.5	93.4	79.4	0.72	0.68	-0.24	-0.26	7.6	8.1	192.5	178.9	162.7	151.2
57	91.4	88.0	93.4	79.7	1.14	1.07	-0.34	-0.35	7.1	7.2	280.3	250.8	168.9	151.2
58	91.4	88.0	94.5	79.8	0.29	0.28	-0.08	-0.09	5.9	6.8	172.9	167.6	155.9	151.2
Avs.	91.8	88.4	94.1	79.7	0.61	0.58	-0.18	-0.20	6.7	7.4	204.8	191.4	160.8	151.2
Std Dv	0.7	0.7	1.0	0.4	0.50	0.46	0.16	0.16	1.0	0.7	62.6	48.9	7.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
17	94.9	91.7	96.5	83.0	1.31	1.24	-0.49	-0.50	8.2	8.4	310.7	271.0	173.3	151.2
18	93.6	90.2	95.5	81.2	0.93	0.89	-0.30	-0.32	6.8	7.2	178.8	161.5	167.4	151.2
19	93.9	90.4	95.9	82.7	0.77	0.74	-0.29	-0.28	7.6	7.4	505.7	463.9	164.8	151.2
20											NO TRACKING DATA			
62	93.6	90.4	95.6	82.2	0.08	0.08	-0.03	-0.03	7.2	7.0	254.5	252.1	152.6	151.2
63	93.3	90.1	95.0	81.7	1.20	1.12	-0.37	-0.37	7.6	7.6	297.5	265.8	169.2	151.2
Avs.	93.9	90.6	95.7	82.2	0.86	0.81	-0.30	-0.30	7.5	7.5	309.4	282.8	165.5	151.2
Std Dv	0.7	0.8	0.6	0.8	0.56	0.52	0.19	0.20	0.6	0.6	140.0	127.7	9.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS														
48	95.5	92.0	97.8	84.1	-0.12	-0.10	0.02	0.02	7.5	7.5	475.7	478.8	150.2	151.2
49	96.3	92.9	98.0	84.5	1.34	1.24	-0.35	-0.35	7.4	7.3	651.8	583.4	168.9	151.2
50	95.4	91.9	97.1	83.5	-0.60	-0.56	0.16	0.16	7.7	7.4	507.8	533.1	144.0	151.2
59	94.4	90.9	97.9	84.1	-0.46	-0.42	0.11	0.12	6.9	7.1	397.9	413.4	145.5	151.2
60	95.5	91.8	97.7	84.0	0.40	0.38	-0.12	-0.12	7.2	7.1	363.7	349.9	157.2	151.2
61	94.7	91.4	96.8	83.2	-0.31	-0.28	0.08	0.08	7.5	7.5	316.3	324.6	147.3	151.2
Avs.	95.3	91.8	97.5	83.9	0.04	0.04	-0.02	-0.01	7.4	7.3	452.2	447.2	152.2	151.2
Std Dv	0.8	0.7	0.6	0.5	0.81	0.75	0.21	0.21	0.3	0.2	134.8	114.6	10.5	0.0

TABLE NO. B.3-3.2

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 2 CENTERLINE - 150 M. WEST JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
9	96.3	92.9	99.9	86.4	1.28	1.22	-0.42	-0.40	7.0	6.7	229.0	199.5	103.6	90.2
10	97.1	93.5	99.8	85.6	1.25	1.20	-0.44	-0.47	7.5	8.0	123.6	107.9	103.4	90.2
15	96.4	92.9	99.6	85.9	0.75	0.73	-0.27	-0.27	7.4	7.3	287.1	263.7	98.2	90.2
16	96.7	93.1	100.0	86.4	0.75	0.72	-0.26	-0.25	7.0	6.8	182.8	168.0	98.1	90.2
Avg.	96.6	93.1	99.8	86.1	1.01	0.97	-0.35	-0.35	7.2	7.2	205.6	184.7	100.8	90.2
Std Dv	0.4	0.4	0.2	0.5	0.36	0.34	0.12	0.13	0.3	0.8	84.9	79.5	3.7	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
7											NO TRACKING DATA			
8	91.5	88.5	92.3	78.9	0.36	0.36	-0.16	-0.16	7.3	7.3	352.7	335.2	223.2	212.1
13	91.6	88.4	92.3	79.6	0.14	0.17	-0.14	-0.13	8.1	7.7	828.4	795.8	220.8	212.1
14	91.5	88.4	92.6	78.4	0.31	0.31	-0.13	-0.14	6.9	7.6	244.6	234.4	221.3	212.1
Avg.	91.5	88.4	92.4	79.0	0.27	0.28	-0.14	-0.14	7.4	7.5	475.2	455.2	221.8	212.1
Std Dv	0.1	0.1	0.2	0.9	0.16	0.14	0.02	0.02	0.8	0.3	439.3	423.3	1.8	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
1											NO TRACKING DATA			
2	89.3	86.4	88.9	75.0	0.23	0.25	-0.13	-0.14	7.3	7.7	347.4	333.4	316.3	303.6
3	89.0	86.1	88.8	75.7	0.57	0.56	-0.27	-0.25	8.1	7.6	655.6	607.6	327.6	303.6
4	88.9	86.1	89.0	75.7	-0.17	-0.13	-0.01	-0.01	7.2	7.3	330.2	329.6	304.1	303.6
42	89.4	86.3	89.8	76.9	0.02	0.03	-0.03	-0.03	7.1	6.9	514.6	510.0	306.4	303.6
43	-	87.6	90.1	76.8	0.32	0.30	-	-0.11	-	7.3	856.0	826.9	314.2	303.6
44	89.0	85.8	89.9	76.5	0.24	0.23	-0.08	-0.08	7.0	7.1	490.5	477.3	312.0	303.6
45	89.1	85.9	89.6	76.8	0.43	0.41	-0.14	-0.13	7.3	6.9	602.3	576.8	317.0	303.6
Avg.	89.1	86.3	89.4	76.2	0.23	0.24	-0.11	-0.11	7.3	7.3	542.4	523.1	313.9	303.6
Std Dv	0.2	0.7	0.6	0.8	0.27	0.25	0.11	0.09	0.4	0.4	200.6	188.7	8.5	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
5	85.7	82.7	84.2	70.6	0.68	0.66	-0.28	-0.29	7.8	8.0	542.4	499.3	495.4	456.0
6	87.0	84.2	85.8	72.6	0.32	0.34	-0.19	-0.19	7.8	7.9	761.9	720.8	482.0	456.0
11	85.5	82.6	84.8	72.4	0.69	0.67	-0.27	-0.26	7.5	7.2	880.7	809.6	496.1	456.0
12											NO TRACKING DATA			
Avg.	86.1	83.2	85.0	71.9	0.56	0.56	-0.25	-0.25	7.7	7.7	728.3	676.5	491.1	456.0
Std Dv	1.2	1.2	1.2	1.5	0.30	0.27	0.07	0.07	0.2	0.6	242.7	226.0	11.2	0.0

TABLE NO. B.3-1.3

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 3   CENTERLINE - 150 M. EAST   JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
24	98.9	96.7	99.0	86.6	0.70	0.69	-0.26	-0.27	7.7	7.8	145.5	134.5	144.9	133.9
26	103.4	100.8	103.2	90.3	2.04	1.97	-0.71	-0.73	7.4	7.6	167.4	134.5	166.6	133.9
28	97.9	95.5	98.9	86.4	0.37	0.37	-0.13	-0.13	6.9	6.6	142.7	136.6	139.9	133.9
32	97.8	95.3	98.9	85.2	-0.27	-0.25	0.07	0.08	6.9	7.5	144.6	148.1	130.7	133.9
34	99.0	96.5	99.3	87.0	0.14	0.14	-0.06	-0.06	7.5	7.4	159.2	156.3	136.4	133.9
36	99.3	96.8	101.3	87.9	0.93	0.90	-0.29	-0.32	6.7	7.3	148.9	134.6	148.1	133.9
38	97.6	95.3	99.1	87.1	-0.33	-0.31	0.09	0.09	6.5	6.6	156.7	161.4	129.9	133.9
40	97.7	95.5	98.5	86.1	0.25	0.24	-0.09	-0.09	6.8	7.0	140.2	136.2	137.8	133.9
Avg.	98.9	96.5	99.8	87.1	0.48	0.47	-0.17	-0.18	7.1	7.2	150.6	142.8	141.8	133.9
Std Dv	2.1	2.0	1.8	1.6	0.82	0.79	0.28	0.29	0.5	0.5	10.2	11.8	12.8	0.0
TAKEOFF														
23											NO TRACKING DATA			
25	90.3	87.3	92.7	79.4	-6.31	-5.90	1.65	1.69	6.4	6.5	110.3	199.9	95.2	172.4
27	90.4	87.6	92.6	79.1	-6.32	-5.77	1.67	1.72	6.7	6.9	125.8	223.2	97.2	172.4
29	89.7	86.7	92.2	78.7	-5.75	-5.27	1.48	1.53	6.5	6.7	121.9	206.5	101.8	172.4
31	89.8	86.7	92.1	78.8	-4.94	-4.55	1.35	1.32	6.8	6.6	116.2	184.0	108.9	172.4
33	90.2	87.0	92.6	79.3	-4.55	-4.19	1.27	1.22	6.8	6.5	112.4	172.5	112.3	172.4
35	90.1	87.2	92.8	79.4	-5.48	-5.03	1.45	1.42	6.5	6.4	118.8	197.6	103.7	172.4
37	89.8	86.5	91.9	78.1	-5.02	-4.65	1.39	1.39	6.7	6.7	107.3	172.6	107.2	172.4
39											NO TRACKING DATA			
41	89.6	86.6	91.9	78.3	-4.96	-4.52	1.31	1.33	6.7	6.8	135.5	212.7	109.8	172.4
Avg.	90.0	87.0	92.4	78.9	-5.42	-4.98	1.45	1.45	6.6	6.7	118.5	196.1	104.5	172.4
Std Dv	0.3	0.4	0.4	0.5	0.72	0.67	0.16	0.19	0.2	0.2	9.9	19.9	6.6	0.0

TABLE NO. B.3-2.3

AUGUSTA A-109 HELICOPTER (ITALIAN)

CORRECTION DATA

DOT/TSC
12/21/81

SITE: 3 CENTERLINE - 150 M. EAST JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS														
21	90.6	87.2	92.6	77.5	0.37	0.35	-0.14	-0.16	6.3	7.4	540.4	513.8	159.0	151.2
22	90.1	87.0	91.8	77.2	0.71	0.68	-0.22	-0.25	6.3	7.2	165.8	153.2	163.6	151.2
46	89.2	86.0	91.2	77.2	0.39	0.38	-0.12	-0.13	6.5	7.1	162.9	156.3	157.6	151.2
47	89.2	86.0	92.1	77.0	1.36	1.29	-0.37	-0.44	6.1	7.3	177.2	154.4	173.5	151.2
Avs.	89.8	86.6	91.9	77.2	0.71	0.67	-0.21	-0.25	6.3	7.2	261.6	244.4	163.4	151.2
Std Dv	0.8	0.8	0.7	0.2	0.57	0.53	0.14	0.17	0.2	0.2	227.8	220.0	8.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS														
51	91.3	88.2	94.3	79.6	1.66	1.56	-0.48	-0.52	6.6	7.2	191.4	162.0	178.6	151.2
52	90.5	87.5	92.2	78.3	0.30	0.29	-0.09	-0.10	6.8	7.3	166.1	161.0	156.0	151.2
53	90.8	87.6	93.1	78.7	1.40	1.32	-0.41	-0.45	6.7	7.3	178.6	155.2	174.0	151.2
56	90.8	88.0	92.8	78.7	0.53	0.51	-0.16	-0.17	6.9	7.2	168.1	159.1	159.7	151.2
Avs.	90.9	87.8	93.1	78.8	0.97	0.92	-0.28	-0.31	6.7	7.3	176.0	159.3	167.1	151.2
Std Dv	0.4	0.4	1.1	0.7	0.81	0.75	0.23	0.25	0.2	0.1	14.2	3.7	13.4	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS														
54											NO TRACKING DATA			
55	92.1	89.0	93.1	80.1	0.80	0.76	-0.26	-0.26	7.4	7.3	172.5	159.0	164.0	151.2
57	92.0	88.9	93.6	80.2	1.41	1.33	-0.44	-0.44	7.4	7.4	295.9	258.4	173.1	151.2
58	90.6	87.4	92.3	78.3	0.49	0.47	-0.16	-0.17	7.3	7.5	171.5	162.9	159.1	151.2
Avs.	91.6	88.4	93.0	79.6	0.90	0.85	-0.29	-0.29	7.4	7.4	213.3	193.4	165.4	151.2
Std Dv	1.2	1.2	1.0	1.5	0.66	0.62	0.20	0.19	0.1	0.1	101.2	79.6	10.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
17	93.5	90.4	96.2	83.2	1.38	1.32	-0.48	-0.46	7.7	7.4	310.5	268.8	174.6	151.2
18	93.2	90.1	94.4	81.2	0.75	0.73	-0.27	-0.27	7.5	7.5	247.4	227.4	164.5	151.2
19	93.4	90.3	96.0	82.9	0.71	0.68	-0.25	-0.25	7.2	7.3	458.9	423.6	163.8	151.2
20											NO TRACKING DATA			
62	92.3	89.4	94.6	81.7	-0.05	-0.04	0.01	0.01	7.3	6.7	228.8	229.5	150.7	151.2
63	93.5	90.4	95.4	82.3	1.58	1.49	-0.49	-0.49	7.4	7.3	276.9	237.7	176.1	151.2
Avs.	93.2	90.1	95.3	82.3	0.87	0.84	-0.30	-0.29	7.4	7.2	304.5	277.4	165.9	151.2
Std Dv	0.6	0.5	0.9	0.9	0.74	0.70	0.24	0.23	0.2	0.3	105.9	96.3	11.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS														
48											NO TRACKING DATA			
49	95.3	92.2	97.4	84.1	1.00	0.95	-0.32	-0.28	7.6	6.5	273.6	248.2	166.7	151.2
50	95.9	92.7	98.5	85.1	-0.82	-0.78	0.23	0.23	6.9	7.1	325.8	351.5	140.1	151.2
59	95.5	92.1	97.7	84.4	0.08	0.08	-0.03	-0.03	7.4	7.3	386.3	382.4	152.7	151.2
60	95.7	92.4	98.4	85.2	0.48	0.46	-0.13	-0.12	6.4	6.3	507.1	484.6	158.2	151.2
61	94.8	91.6	97.7	84.5	0.39	0.37	-0.12	-0.12	7.2	7.0	307.2	295.6	157.1	151.2
Avs.	95.4	92.2	97.9	84.7	0.23	0.22	-0.07	-0.06	7.1	6.8	360.0	352.4	155.0	151.2
Std Dv	0.5	0.5	0.6	0.5	0.78	0.74	0.23	0.22	0.5	0.5	106.1	104.0	11.2	0.0

BEST DOCUMENT AVAILABLE

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TABLE NO. B.3-3.3

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 3 CENTERLINE - 150 M. EAST JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
9	94.9	91.6	98.7	85.7	1.11	1.08	-0.36	-0.34	6.7	6.4	167.0	147.7	102.0	90.2
10	95.4	92.5	98.0	84.8	0.70	0.68	-0.26	-0.25	7.5	7.0	265.4	244.7	97.8	90.2
15	96.1	93.0	99.0	86.1	0.91	0.88	-0.31	-0.29	7.0	6.7	146.8	132.6	99.9	90.2
16	95.6	92.5	98.1	84.9	-0.22	-0.20	0.04	0.04	6.9	7.1	175.6	177.9	89.0	90.2
Avg.	95.5	92.4	98.4	85.4	0.62	0.61	-0.22	-0.21	7.0	6.8	188.7	175.8	97.2	90.2
Std Dv	0.6	0.7	0.6	0.8	0.72	0.69	0.22	0.21	0.4	0.4	64.4	60.9	7.0	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
7											NO TRACKING DATA			
8	90.2	87.6	90.0	77.4	0.09	0.12	-0.11	-0.11	7.6	7.5	640.2	619.7	219.2	212.1
13	90.9	88.0	92.2	79.4	0.03	0.05	-0.07	-0.07	8.0	7.7	419.6	411.3	216.5	212.1
14	90.0	87.4	89.7	77.1	0.11	0.13	-0.09	-0.09	7.7	7.6	360.1	350.6	217.9	212.1
Avg.	90.4	87.7	90.6	78.0	0.08	0.10	-0.09	-0.09	7.7	7.6	473.3	460.5	217.8	212.1
Std Dv	0.6	0.4	1.9	1.7	0.06	0.06	0.03	0.03	0.3	0.2	208.7	199.6	1.9	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
1											NO TRACKING DATA			
2	88.9	86.1	87.7	74.9	0.07	0.12	-0.11	-0.11	7.8	7.7	530.0	513.1	313.6	303.6
3	88.2	85.2	89.4	76.8	0.73	0.73	-0.29	-0.28	7.2	6.8	908.8	827.7	333.3	303.6
4	88.3	85.6	87.7	74.8	-0.24	-0.20	0.00	0.00	7.4	7.6	448.8	448.7	303.6	303.6
42	88.9	86.1	88.3	76.0	0.19	0.19	-0.08	-0.08	7.9	7.6	552.8	539.5	311.1	303.6
43	88.9	86.2	89.7	77.6	0.53	0.50	-0.17	-0.16	7.5	7.0	863.0	819.7	319.6	303.6
44											NO TRACKING DATA			
45	87.8	84.7	88.1	74.9	0.49	0.46	-0.14	-0.14	7.0	6.9	687.1	655.3	318.3	303.6
Avg.	88.5	85.7	88.5	75.8	0.29	0.30	-0.13	-0.13	7.5	7.3	665.1	634.0	316.6	303.6
Std Dv	0.5	0.7	1.0	1.3	0.40	0.37	0.11	0.10	0.4	0.5	210.2	180.5	11.2	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
5	81.5	79.5	81.9	69.9	0.83	0.81	-0.30	-0.30	6.9	6.8	1053.7	953.0	504.2	456.0
6	85.4	82.9	83.3	71.2	0.19	0.20	-0.16	-0.15	7.9	7.7	681.1	651.0	477.1	456.0
11	85.1	82.3	83.1	70.7	0.71	0.66	-0.29	-0.28	8.1	7.8	1042.6	958.6	495.9	456.0
12											NO TRACKING DATA			
Avg.	84.0	81.6	82.8	70.6	0.58	0.56	-0.25	-0.24	7.6	7.4	925.8	854.2	492.4	456.0
Std Dv	3.0	2.5	1.1	0.9	0.48	0.45	0.11	0.12	0.9	0.7	244.7	203.2	19.7	0.0

TABLE NO. B.3-1.4

AUGUSTA A-109 HELICOPTER (ITALIAN)

CORRECTION DATA

DOT/TSC
12/21/81

SITE: 4 SIDELINE - 164 M. NORTH JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
24	97.8	94.9	98.4	85.8	1.03	0.99	-0.35	-0.35	7.5	7.4	262.3	235.2	213.0	191.0
26	-	94.2	98.5	85.6	1.38	1.32	-	-0.47	-	7.4	234.6	203.1	220.6	191.0
28	94.9	92.0	96.1	81.9	-0.29	-0.26	0.07	0.08	6.6	7.4	189.6	194.3	186.4	191.0
32	93.7	90.8	93.8	80.3	-0.13	-0.11	0.02	0.02	7.2	7.2	190.1	191.6	189.5	191.0
34	94.4	91.4	95.9	81.6	-0.04	-0.03	0.00	0.00	6.4	7.2	193.4	193.4	191.0	191.0
36	96.2	93.6	96.1	83.7	0.16	0.16	-0.07	-0.06	7.1	6.9	244.7	239.6	195.1	191.0
38	93.2	90.4	93.0	80.0	-0.16	-0.14	0.03	0.03	7.1	7.1	268.3	271.0	189.1	191.0
40	95.9	93.2	97.2	84.1	0.12	0.12	-0.05	-0.05	7.5	7.3	235.8	232.0	194.1	191.0
64	94.9	91.7	97.6	84.2	-0.21	-0.19	0.06	0.06	7.1	7.2	200.1	203.9	187.4	191.0
Avs.	95.1	92.5	96.3	83.0	0.21	0.21	-0.04	-0.08	7.0	7.2	224.4	218.2	196.2	191.0
Std Dv	1.6	1.7	2.1	2.3	0.63	0.60	0.15	0.21	0.4	0.2	33.7	29.4	13.0	0.0
TAKEOFF														
23											NO TRACKING DATA			
25	91.8	88.4	93.6	79.5	-2.12	-1.99	0.60	0.62	7.0	7.2	188.5	230.0	166.4	203.1
27	91.4	87.9	93.6	79.2	-2.20	-2.07	0.60	0.66	6.6	7.2	179.5	221.1	164.9	203.1
29	-	88.1	93.2	79.4	-1.93	-1.81	-	0.57	-	7.3	190.7	228.0	169.8	203.1
31	91.4	88.4	92.8	78.9	-1.85	-1.74	0.52	0.56	7.1	7.6	213.7	253.4	171.2	203.1
33	91.3	88.2	92.9	78.7	-1.92	-1.80	0.54	0.58	6.9	7.5	197.5	236.1	169.9	203.1
35	91.1	87.9	92.1	78.7	-2.25	-2.12	0.67	0.67	7.4	7.4	199.3	245.6	164.7	203.1
37	91.8	88.7	93.3	79.2	-1.76	-1.66	0.50	0.54	7.0	7.5	193.3	227.9	172.2	203.1
39											NO TRACKING DATA			
41	91.5	88.2	93.6	79.1	-1.71	-1.61	0.46	0.51	6.7	7.4	197.7	231.7	173.2	203.1
Avs.	91.5	88.2	93.1	79.1	-1.97	-1.85	0.56	0.59	7.0	7.4	195.0	234.3	169.0	203.1
Std Dv	0.3	0.3	0.6	0.3	0.22	0.20	0.08	0.06	0.3	0.2	10.7	11.4	3.6	0.0

TABLE NO. B.3-2.4

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 4 SIDELINE - 164 M. NORTH JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYBY - TARGET INDICATED AIRSPEED 87 KTS														
21	87.0	84.2	86.4	73.6	-0.83	-0.77	0.15	0.15	7.3	7.4	509.5	533.6	203.3	212.9
22	87.5	84.4	87.2	74.1	0.33	0.32	-0.13	-0.13	7.1	7.3	257.9	247.3	222.1	212.9
46	86.4	83.7	87.1	75.1	0.04	0.04	-0.02	-0.02	6.8	6.4	251.7	250.0	214.4	212.9
47	87.5	85.0	87.1	75.1	-0.13	-0.12	0.02	0.02	7.2	6.5	414.3	417.1	211.5	212.9
Avg.	87.1	84.3	87.0	74.5	-0.15	-0.13	0.00	0.00	7.1	6.9	358.3	362.0	212.8	212.9
Std Dv	0.6	0.7	0.5	0.9	0.60	0.57	0.14	0.14	0.3	0.6	154.0	170.6	9.5	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 102 KTS														
51	89.2	86.0	89.6	75.9	0.73	0.68	-0.22	-0.22	7.4	7.5	370.6	346.0	228.1	212.9
52											NO TRACKING DATA			
53	88.5	85.3	88.9	75.4	0.59	0.57	-0.18	-0.19	7.1	7.3	277.0	261.3	225.8	212.9
56	87.2	84.0	88.3	75.2	-0.01	-0.01	0.00	0.00	6.5	6.4	250.3	250.1	213.1	212.9
Avg.	88.3	85.1	88.9	75.5	0.44	0.41	-0.13	-0.14	7.0	7.1	299.3	285.8	222.3	212.9
Std Dv	1.5	1.4	0.9	0.6	0.56	0.52	0.17	0.17	0.6	0.8	89.4	74.2	11.4	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 116 KTS														
54											NO TRACKING DATA			
55	89.6	86.5	90.1	77.0	0.36	0.35	-0.11	-0.11	6.8	6.7	281.1	271.1	220.8	212.9
57	90.4	87.2	90.2	76.9	0.93	0.89	-0.31	-0.31	7.9	7.8	297.5	271.8	233.1	212.9
58	87.9	84.7	88.6	75.2	-0.13	-0.12	0.03	0.03	7.1	7.3	253.0	255.5	210.8	212.9
Avg.	89.3	86.1	89.6	76.4	0.39	0.37	-0.13	-0.13	7.3	7.3	277.2	266.1	221.6	212.9
Std Dv	1.8	1.9	1.2	1.4	0.75	0.71	0.24	0.24	0.8	0.7	31.8	13.0	15.8	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
17	90.2	87.6	92.4	79.2	-0.11	-0.09	-0.04	-0.04	6.4	6.8	633.0	624.6	215.8	212.9
18	91.5	88.4	92.0	78.3	0.70	0.67	-0.26	-0.26	7.4	7.5	600.8	554.6	230.7	212.9
19	90.2	87.5	90.0	78.2	-0.19	-0.16	0.01	0.01	7.8	7.1	266.8	267.8	212.2	212.9
20											NO TRACKING DATA			
62											NO TRACKING DATA			
63	90.3	87.5	90.8	78.2	0.28	0.27	-0.09	-0.09	7.5	7.3	225.7	219.4	219.1	212.9
Avg.	90.6	87.7	91.3	78.5	0.17	0.17	-0.09	-0.09	7.3	7.2	431.6	416.6	219.4	212.9
Std Dv	0.8	0.5	1.3	0.6	0.50	0.47	0.14	0.14	0.8	0.4	263.4	248.3	9.8	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 145 KTS														
48											NO TRACKING DATA			
49	93.5	90.2	94.1	81.0	0.80	0.75	-0.23	-0.22	7.7	7.5	760.8	710.2	228.1	212.9
50	94.1	90.1	95.9	80.9	-0.29	-0.26	0.07	0.07	6.5	7.1	406.0	415.6	208.0	212.9
59	92.7	89.5	92.8	79.8	-0.23	-0.21	0.07	0.07	7.8	7.7	248.1	253.0	208.8	212.9
60	93.6	89.6	95.7	82.1	0.23	0.22	-0.07	-0.06	7.0	6.5	662.2	647.3	217.9	212.9
61	92.4	89.4	92.7	79.6	-0.35	-0.32	0.10	0.10	7.6	7.5	248.8	256.5	206.6	212.9
Avg.	93.3	89.8	94.2	80.7	0.03	0.04	-0.01	-0.01	7.3	7.3	465.2	456.5	213.9	212.9
Std Dv	0.8	0.4	1.8	1.2	0.56	0.52	0.16	0.15	0.6	0.6	273.0	247.6	10.5	0.0

TABLE NO. B.3-3.4

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 4 SIDELINE - 164 M. NORTH JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
9	91.2	88.5	91.5	79.8	-0.03	-0.02	-0.03	-0.03	7.7	7.0	177.5	176.0	176.5	175.0
10	92.4	88.9	93.2	79.9	0.67	0.64	-0.26	-0.25	7.6	7.4	190.9	176.7	189.1	175.0
15	90.5	87.6	91.4	78.8	-0.25	-0.21	0.00	0.00	7.7	7.5	668.1	667.3	175.2	175.0
16	90.1	87.1	92.1	78.2	0.32	0.35	-0.15	-0.17	6.7	7.4	422.2	400.6	184.4	175.0
Avg.	91.0	88.0	92.0	79.2	0.18	0.19	-0.11	-0.11	7.4	7.3	364.7	355.2	181.3	175.0
Std Dv	1.3	1.0	1.0	1.0	0.49	0.46	0.15	0.14	0.6	0.2	283.4	285.9	8.1	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
7											NO TRACKING DATA			
8	90.5	87.5	89.7	76.8	0.22	0.22	-0.14	-0.13	8.0	7.8	475.6	457.3	270.2	259.8
13	89.3	86.6	88.9	76.2	-0.49	-0.47	0.10	0.10	7.6	7.6	313.5	322.7	252.4	259.8
14	90.1	87.1	89.5	77.6	0.33	0.33	-0.18	-0.17	7.7	6.9	989.1	936.1	274.5	259.8
Avg.	90.0	87.1	89.4	76.9	0.02	0.03	-0.07	-0.07	7.8	7.4	592.7	572.1	265.7	259.8
Std Dv	0.9	0.6	0.6	1.0	0.63	0.61	0.21	0.21	0.3	0.7	302.8	456.0	16.6	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
2	89.7	86.9	88.4	75.1	0.26	0.29	-0.17	-0.18	7.7	7.8	867.1	823.1	356.7	338.6
3	87.7	84.9	88.6	74.7	-0.45	-0.42	0.06	0.06	6.9	7.2	429.8	438.2	332.1	338.6
4	88.5	85.9	86.7	73.7	-0.33	-0.23	-0.01	-0.01	8.0	7.8	799.8	796.5	340.0	338.6
42											NO TRACKING DATA			
43	87.4	84.4	89.1	74.9	-0.28	-0.27	0.05	0.06	6.4	7.0	422.7	430.9	332.1	338.6
44											NO TRACKING DATA			
45	87.2	84.1	89.1	74.7	-0.10	-0.09	0.01	0.01	6.5	7.3	453.7	455.1	337.6	338.6
Avg.	88.1	85.2	88.4	74.6	-0.18	-0.14	-0.01	-0.01	7.1	7.4	594.6	568.8	339.7	338.6
Std Dv	1.2	1.3	1.1	0.6	0.32	0.31	0.11	0.11	0.8	0.5	253.6	233.5	11.7	0.0
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
5	84.6	82.1	85.4	71.2	-0.30	-0.23	0.00	0.00	6.6	7.0	651.2	650.4	480.6	480.0
6	88.0	85.0	86.9	73.0	0.42	0.43	-0.21	-0.21	7.4	7.6	1050.7	984.5	512.3	480.0
11	84.6	82.1	85.6	70.7	-0.18	-0.12	-0.02	-0.03	6.5	7.1	681.2	675.6	484.0	480.0
12											NO TRACKING DATA			
Avg.	85.7	83.0	85.9	71.7	-0.02	0.03	-0.08	-0.08	6.8	7.2	794.4	770.2	492.3	480.0
Std Dv	2.8	2.4	1.2	1.7	0.55	0.50	0.16	0.16	0.7	0.4	182.5	152.6	24.6	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.3-1.5

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
24	93.4	90.6	92.6	79.1	-0.21	-0.19	0.05	0.05	7.0	7.5	189.7	192.6	188.1	191.0
26	95.1	92.7	95.9	84.6	0.30	0.30	-0.11	-0.10	6.6	6.0	355.4	341.9	198.5	191.0
28	95.4	93.1	94.8	82.4	0.25	0.25	-0.11	-0.10	8.0	7.4	243.1	235.4	197.2	191.0
32	95.3	92.9	95.0	82.5	-0.05	-0.04	-0.01	-0.01	7.2	7.3	251.0	250.3	191.5	191.0
34	94.7	92.3	94.6	82.5	0.01	0.02	-0.03	-0.03	7.5	7.4	277.6	275.1	192.7	191.0
36	93.4	90.8	92.4	79.7	0.42	0.40	-0.15	-0.15	7.6	7.4	238.9	228.0	200.0	191.0
38	93.6	91.1	95.0	82.1	0.04	0.04	-0.03	-0.03	6.4	6.4	242.3	240.1	192.8	191.0
40	92.6	89.8	91.5	78.6	-0.24	-0.22	0.06	0.06	7.0	6.9	187.8	191.7	187.1	191.0
64	90.1	86.8	91.1	77.9	-0.07	-0.06	0.02	0.02	6.9	6.7	190.3	191.4	189.9	191.0
Avg.	93.7	91.1	93.7	81.0	0.05	0.06	-0.03	-0.03	7.2	7.0	241.8	238.5	193.1	191.0
Std Dv	1.8	2.1	1.9	2.5	0.24	0.23	0.08	0.08	0.5	0.6	56.8	51.8	4.9	0.0
TAKEOFF														
23											NO TRACKING DATA			
25	91.7	88.5	91.7	78.3	-1.81	-1.70	0.61	0.60	8.1	8.0	172.2	204.8	170.8	203.1
27	90.9	87.9	92.0	78.4	-1.99	-1.86	0.59	0.60	7.4	7.5	194.7	234.0	169.0	203.1
29	90.6	87.3	91.2	77.9	-1.88	-1.76	0.57	0.56	7.7	7.7	213.3	252.6	171.4	203.1
31	91.6	88.4	92.5	78.5	-1.57	-1.48	0.49	0.51	7.5	7.8	175.0	203.4	174.7	203.1
33	91.4	88.2	92.5	78.5	-1.34	-1.27	0.40	0.43	7.2	7.7	178.8	203.3	178.6	203.1
35	91.9	88.7	93.6	79.7	-1.39	-1.32	0.40	0.42	6.9	7.3	179.4	204.9	177.8	203.1
37	91.3	88.1	91.6	78.1	-1.69	-1.60	0.54	0.55	7.6	7.8	175.2	206.2	172.5	203.1
39											NO TRACKING DATA			
41	90.6	87.4	91.1	77.6	-1.64	-1.55	0.53	0.54	7.7	7.9	173.3	203.1	173.2	203.1
Avg.	91.2	88.1	92.0	78.4	-1.66	-1.57	0.52	0.53	7.5	7.7	182.7	214.0	173.5	203.1
Std Dv	0.5	0.5	0.9	0.7	0.25	0.22	0.09	0.07	0.4	0.2	15.4	20.3	3.6	0.0

TABLE NO. B.3-2.5

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS														
21	88.2	84.9	88.3	74.8	1.00	0.91	-0.32	-0.32	7.4	7.5	614.5	556.4	235.2	212.9
22	88.5	86.0	86.8	74.1	0.16	0.16	-0.08	-0.09	7.6	7.7	218.5	212.9	218.5	212.9
46	-	85.4	90.5	77.6	0.35	0.34	-	-0.11	-	6.8	247.8	238.7	221.0	212.9
47	88.1	85.1	88.3	75.4	1.36	1.27	-0.42	-0.41	7.4	7.3	254.3	223.1	242.7	212.9
Avg.	88.3	85.4	88.5	75.5	0.72	0.67	-0.27	-0.23	7.5	7.3	333.8	307.8	229.3	212.9
Std Dv	0.3	0.6	1.8	1.9	0.69	0.63	0.25	0.19	0.2	0.5	230.0	203.4	14.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS														
51	88.7	85.8	88.5	75.8	1.09	1.02	-0.33	-0.32	7.2	7.1	255.7	230.2	236.5	212.9
52	88.6	85.9	90.4	76.8	0.38	0.37	-0.11	-0.11	6.4	6.8	299.5	288.2	221.2	212.9
53	87.6	84.5	87.5	74.9	1.02	0.96	-0.31	-0.30	7.3	7.0	256.1	232.2	234.8	212.9
56	87.9	85.4	89.4	75.6	0.35	0.34	-0.11	-0.11	6.8	6.9	294.7	284.4	220.7	212.9
Avg.	88.2	85.4	89.0	75.8	0.71	0.67	-0.21	-0.21	6.9	6.9	276.5	258.7	228.3	212.9
Std Dv	0.7	0.8	1.5	1.0	0.49	0.45	0.15	0.14	0.5	0.2	29.2	39.0	10.5	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS														
54	90.0	87.6	90.8	77.1	0.49	0.47	-0.15	-0.16	6.9	7.6	278.5	265.3	223.5	212.9
55	87.9	84.8	87.2	74.8	0.43	0.40	-0.14	-0.13	7.8	7.3	284.1	272.6	222.0	212.9
57	87.2	84.1	87.3	74.2	0.43	0.39	-0.13	-0.13	7.4	7.3	534.3	513.6	221.5	212.9
58	88.7	86.4	89.4	76.4	0.46	0.44	-0.14	-0.14	7.3	7.1	286.1	273.4	222.8	212.9
Avg.	88.5	85.7	88.7	75.6	0.45	0.42	-0.14	-0.14	7.4	7.3	345.8	331.2	222.5	212.9
Std Dv	1.5	1.9	2.1	1.7	0.04	0.05	0.01	0.02	0.4	0.3	154.0	149.0	1.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
17	91.7	88.3	93.8	79.2	1.26	1.20	-0.40	-0.43	7.0	7.6	433.8	380.7	242.6	212.9
18	90.7	88.4	91.7	79.4	0.08	0.10	-0.09	-0.09	7.3	7.2	697.8	677.7	219.2	212.9
19	91.4	87.9	95.3	80.7	0.77	0.73	-0.22	-0.24	5.9	6.6	416.0	382.0	231.9	212.9
20											NO TRACKING DATA			
62	90.3	87.8	90.9	78.0	0.15	0.14	-0.05	-0.05	7.4	7.5	293.4	288.8	216.3	212.9
63	90.5	87.2	92.4	77.9	1.09	1.03	-0.31	-0.34	7.2	7.8	420.4	380.6	235.2	212.9
Avg.	90.9	87.9	92.8	79.0	0.67	0.64	-0.21	-0.23	6.9	7.3	452.3	422.0	229.1	212.9
Std Dv	0.7	0.5	2.0	1.3	0.62	0.58	0.17	0.19	0.7	0.6	171.5	171.4	12.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS														
48											NO TRACKING DATA			
49	93.7	90.1	95.8	81.1	0.88	0.82	-0.22	-0.25	6.6	7.3	528.1	488.6	230.2	212.9
50	90.8	87.8	91.2	78.4	-0.51	-0.46	0.14	0.14	7.6	7.4	532.6	555.7	204.1	212.9
59	91.2	87.7	93.1	77.9	-0.03	-0.02	0.00	0.00	7.0	7.9	387.1	386.9	213.0	212.9
60	92.8	89.9	94.0	80.4	0.22	0.21	-0.07	-0.07	7.0	7.5	577.4	565.0	217.6	212.9
61	92.2	88.6	95.7	81.6	0.28	0.27	-0.08	-0.08	6.3	6.5	524.0	509.8	218.9	212.9
Avg.	92.2	88.8	94.0	79.9	0.17	0.16	-0.05	-0.05	6.9	7.3	509.8	501.2	216.7	212.9
Std Dv	1.4	1.3	2.2	1.9	0.58	0.54	0.15	0.16	0.6	0.6	83.0	82.3	10.9	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.3-3.5

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
9	91.1	87.5	92.5	78.9	0.66	0.54	-0.22	-0.23	7.7	7.8	401.8	375.8	187.1	175.0
10	92.4	90.0	92.3	79.9	-0.22	-0.24	0.05	0.05	8.1	8.0	182.0	184.7	172.4	175.0
15	90.9	87.5	94.0	79.5	0.39	0.39	-0.14	-0.15	6.1	6.7	378.5	359.6	184.2	175.0
16	91.1	88.8	91.2	79.4	-0.56	-0.44	0.11	0.10	8.1	7.6	221.2	228.2	169.6	175.0
Avs.	91.4	88.4	92.5	79.4	0.07	0.06	-0.05	-0.06	7.5	7.5	295.9	287.1	178.3	175.0
Std Dv	0.9	1.5	1.4	0.5	0.68	0.58	0.19	0.19	1.2	0.7	135.3	116.3	10.6	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
7											NO TRACKING DATA			
8	90.2	87.7	90.4	77.8	0.11	-0.05	-0.03	-0.03	7.1	7.2	336.1	332.9	262.3	259.8
13	90.4	86.9	92.2	79.4	0.44	0.44	-0.19	-0.18	6.8	6.5	801.6	752.5	276.7	259.8
14	89.4	87.1	89.0	76.7	-0.22	-0.21	0.02	0.02	7.4	7.3	336.9	338.5	258.5	259.8
Avs.	90.0	87.2	90.5	78.0	0.11	0.06	-0.07	-0.06	7.1	7.0	491.5	474.6	265.8	259.8
Std Dv	0.8	0.6	2.3	1.9	0.47	0.48	0.16	0.15	0.4	0.6	379.8	340.3	13.6	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
2	89.5	86.7	88.7	74.6	0.19	0.13	-0.10	-0.10	7.3	7.9	450.0	436.5	349.1	338.6
3	89.6	86.0	91.1	76.8	1.54	1.34	-0.44	-0.46	7.0	7.4	767.4	664.8	390.8	338.6
4	88.6	85.9	88.1	74.1	-0.10	-0.20	0.01	0.01	7.2	7.8	450.6	452.1	337.5	338.6
42	89.8	86.9	89.6	76.5	0.29	0.28	-0.09	-0.10	6.7	6.9	562.0	544.1	349.8	338.6
43	90.3	86.9	90.6	77.6	1.05	0.97	-0.29	-0.27	7.6	7.3	1453.3	1333.2	369.1	338.6
44	88.4	85.4	89.1	75.4	0.20	0.19	-0.07	-0.07	6.9	7.2	389.3	380.2	346.7	338.6
45	89.4	86.0	89.5	76.4	0.89	0.78	-0.23	-0.22	7.2	7.0	992.0	921.2	364.6	338.6
Avs.	89.4	86.3	89.5	75.9	0.58	0.50	-0.17	-0.17	7.1	7.3	723.5	676.0	358.2	338.6
Std Dv	0.7	0.6	1.2	1.4	0.65	0.60	0.17	0.17	0.3	0.4	240.4	233.5	19.7	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
5	87.1	83.6	86.6	72.9	1.92	1.49	-0.51	-0.50	7.7	7.6	1282.9	1102.4	558.6	480.0
6	87.4	84.4	85.9	71.9	0.40	0.12	-0.09	-0.09	8.0	8.0	538.8	524.7	492.9	480.0
11	86.0	82.7	85.4	71.6	1.39	1.32	-0.46	-0.48	7.7	7.9	848.3	738.3	551.5	480.0
12											NO TRACKING DATA			
Avs.	86.8	83.6	86.0	72.1	1.24	0.98	-0.35	-0.36	7.8	7.8	890.0	788.5	534.3	480.0
Std Dv	1.1	1.2	0.8	1.0	1.09	1.06	0.32	0.33	0.2	0.3	353.7	268.5	51.0	0.0

NO TRACKING DATA

TABLE NO. B.3-1.5G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
24	95.9	93.4	95.2	82.6	-0.23	-0.22	0.05	0.05	7.1	7.1	206.2	209.2	188.9	191.7
26	96.9	95.1	97.0	85.2	0.30	0.30	-0.12	-0.12	7.2	7.1	356.0	342.3	199.4	191.7
28	97.6	95.5	97.3	85.2	0.25	0.24	-0.11	-0.11	7.7	7.8	243.8	236.2	197.9	191.7
32	97.7	95.5	98.6	85.6	-0.09	-0.06	-0.01	-0.01	6.9	7.2	241.6	240.9	192.2	191.7
34	97.9	95.7	99.1	86.2	-0.05	-0.01	-0.03	-0.03	6.9	7.3	316.0	313.1	193.5	191.7
36	95.8	93.7	95.5	83.2	0.42	0.40	-0.15	-0.15	7.5	7.5	259.4	247.6	200.8	191.7
38	96.5	94.0	97.5	84.8	0.01	0.03	-0.03	-0.03	6.6	6.6	243.0	240.7	193.5	191.7
40	95.4	92.9	94.2	82.2	-0.25	-0.23	0.06	0.06	7.0	6.7	187.9	191.8	187.9	191.7
64	93.4	90.4	93.9	81.5	-0.08	-0.07	0.02	0.02	7.2	7.2	191.0	192.1	190.6	191.7
Avs.	96.4	94.0	96.5	84.1	0.03	0.04	-0.04	-0.04	7.1	7.2	249.4	246.0	193.9	191.7
Std Dv	1.5	1.8	2.0	1.8	0.25	0.24	0.08	0.08	0.4	0.4	59.9	54.9	4.9	0.0
TAKEOFF														
23											NO TRACKING DATA			
25	94.3	90.9	95.3	81.6	-2.10	-1.86	0.58	0.58	7.6	7.7	192.6	229.1	171.4	203.9
27	93.3	90.1	95.2	81.7	-2.23	-1.97	0.55	0.57	6.9	7.1	195.1	234.6	169.5	203.9
29	-	88.5	93.9	80.7	-1.97	-1.76	-	0.55	-	7.4	188.8	223.8	172.0	203.9
31	94.6	91.5	95.7	82.6	-1.82	-1.61	0.49	0.49	7.5	7.5	193.9	225.5	175.3	203.9
33	94.6	91.7	96.3	83.0	-1.54	-1.38	0.40	0.40	7.2	7.2	203.9	232.0	179.2	203.9
35	95.0	91.7	96.6	83.3	-1.62	-1.43	0.42	0.42	7.2	7.2	199.1	227.6	178.3	203.9
37	94.2	91.1	95.6	82.2	-1.92	-1.71	0.51	0.52	7.2	7.4	188.0	221.3	173.1	203.9
39											NO TRACKING DATA			
41	94.3	91.2	95.0	81.8	-1.82	-1.65	0.53	0.54	7.7	7.8	187.7	220.1	173.9	203.9
Avs.	94.3	90.8	95.5	82.1	-1.88	-1.67	0.50	0.51	7.3	7.4	193.6	226.8	174.1	203.9
Std Dv	0.6	1.2	0.9	0.9	0.25	0.22	0.07	0.07	0.3	0.3	6.2	5.5	3.6	0.0

TABLE NO. B.3-2.5G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/21/81

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 87 KTS														
21	91.1	87.9	91.5	79.5	1.00	0.91	-0.31	-0.29	7.3	6.7	585.9	530.8	236.0	213.8
22	91.5	88.7	90.9	78.1	0.11	0.14	-0.08	-0.08	7.5	7.5	229.5	223.6	219.4	213.8
46	92.4	89.4	94.4	81.1	0.36	0.34	-0.11	-0.10	6.6	6.5	248.6	239.5	221.9	213.8
47	91.5	88.5	92.5	79.9	1.44	1.29	-0.42	-0.40	7.4	7.0	255.1	224.0	243.6	213.8
Avs.	91.6	88.6	92.3	79.6	0.73	0.67	-0.23	-0.22	7.2	6.9	329.8	304.5	230.2	213.8
Std Dv	0.7	0.8	1.8	1.5	0.74	0.64	0.20	0.19	0.5	0.5	209.5	185.0	14.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 102 KTS														
51	91.3	88.5	92.3	79.8	1.10	1.04	-0.33	-0.32	7.2	7.0	256.5	231.0	237.4	213.8
52	92.2	89.4	93.9	80.3	0.42	0.38	-0.11	-0.12	6.8	7.2	300.1	288.9	222.1	213.8
53											NO TRACKING DATA			
56	91.5	88.7	92.5	79.4	0.38	0.35	-0.11	-0.11	7.4	7.4	276.6	267.0	221.5	213.8
Avs.	91.7	88.8	92.9	79.9	0.63	0.59	-0.18	-0.18	7.1	7.2	277.8	262.3	227.0	213.8
Std Dv	0.7	0.7	1.2	0.6	0.57	0.55	0.18	0.17	0.4	0.3	30.8	41.3	12.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 116 KTS														
54											NO TRACKING DATA			
55	91.0	88.0	91.2	79.4	0.42	0.40	-0.13	-0.13	7.5	7.2	234.0	224.5	222.9	213.8
57	90.5	87.7	91.1	79.2	0.41	0.38	-0.13	-0.12	7.3	6.7	226.8	218.0	222.5	213.8
58	92.1	89.4	93.5	80.8	0.48	0.44	-0.14	-0.13	6.9	6.9	251.6	240.5	223.7	213.8
Avs.	91.2	88.4	91.9	79.8	0.44	0.41	-0.13	-0.13	7.2	6.9	237.5	227.7	223.0	213.8
Std Dv	1.2	1.3	1.9	1.2	0.05	0.04	0.01	0.01	0.4	0.3	18.1	16.4	0.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
17	95.0	91.7	97.3	84.1	1.31	1.21	-0.39	-0.39	6.9	6.8	361.9	317.8	243.5	213.8
18	93.7	91.1	94.4	82.4	0.13	0.15	-0.10	-0.09	7.8	7.2	247.7	240.5	220.2	213.8
19	95.0	91.9	98.0	84.2	0.76	0.73	-0.24	-0.26	6.5	7.1	455.5	418.5	232.7	213.8
20											NO TRACKING DATA			
62	93.4	90.6	94.3	81.9	0.15	0.14	-0.05	-0.05	7.6	7.4	269.0	264.8	217.2	213.8
63	94.3	91.1	96.2	82.7	1.23	1.11	-0.32	-0.32	7.4	7.6	458.1	414.8	236.1	213.8
Avs.	94.3	91.3	96.0	83.1	0.72	0.67	-0.22	-0.22	7.2	7.2	358.5	331.3	229.9	213.8
Std Dv	0.8	0.6	1.9	1.2	0.65	0.59	0.17	0.17	0.6	0.3	114.9	95.6	12.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 145 KTS														
48	96.1	93.1	97.8	84.9	0.07	0.08	-0.04	-0.03	7.6	7.3	288.7	285.6	216.1	213.8
49	96.5	93.1	99.1	84.4	0.98	0.86	-0.23	-0.24	6.7	7.2	486.7	450.4	231.0	213.8
50	95.3	92.4	96.5	84.5	-0.52	-0.47	0.14	0.13	7.6	6.8	235.4	245.6	204.9	213.8
59	94.6	91.2	97.3	83.2	-0.05	-0.03	0.00	0.00	6.7	7.1	349.5	349.4	213.9	213.8
60	95.6	92.5	98.0	84.1	0.22	0.21	-0.07	-0.07	7.0	7.5	331.5	324.4	218.5	213.8
61	95.4	91.9	98.3	84.1	0.28	0.27	-0.08	-0.09	7.0	7.6	524.3	510.2	219.7	213.8
Avs.	95.6	92.4	97.8	84.2	0.16	0.15	-0.05	-0.05	7.1	7.3	369.4	360.9	217.4	213.8
Std Dv	0.7	0.8	1.0	0.6	0.55	0.49	0.13	0.14	0.5	0.3	126.5	112.6	9.5	0.0

TABLE NO. B.3-3.5G

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/22/81

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		TRACKING DATA (METERS) (REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
9	94.3	90.8	96.6	83.3	0.51	0.50	-0.21	-0.21	7.2	7.2	293.7	274.7	187.8	175.6
10	94.9	91.8	97.3	84.8	-0.33	-0.29	0.04	0.04	6.6	6.1	182.6	185.3	173.1	175.6
15	94.1	90.7	97.8	82.8	0.32	0.35	-0.14	-0.16	6.3	7.0	341.4	324.3	184.9	175.6
16	94.4	91.2	96.8	83.6	-0.55	-0.46	0.09	0.09	6.7	6.8	200.1	206.4	170.3	175.6
Avg.	94.4	91.1	97.1	83.6	-0.01	0.03	-0.05	-0.06	6.7	6.8	254.4	247.7	179.0	175.6
Std Dv	0.4	0.6	0.7	1.0	0.62	0.58	0.18	0.18	0.5	0.6	92.7	78.1	10.5	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
7											NO TRACKING DATA			
8	92.6	90.0	92.9	80.3	-0.18	-0.11	-0.03	-0.03	7.1	7.0	318.7	315.7	263.3	260.8
13	93.8	90.8	95.9	82.3	0.42	0.44	-0.19	-0.21	7.0	7.5	464.9	436.6	277.7	260.8
14	91.7	89.3	92.1	79.8	-0.44	-0.32	0.02	0.01	7.4	7.2	414.3	416.2	259.6	260.8
Avg.	92.7	90.0	93.7	80.8	-0.07	0.00	-0.07	-0.08	7.2	7.3	399.3	389.5	266.8	260.8
Std Dv	1.5	1.1	2.9	1.9	0.62	0.56	0.16	0.17	0.3	0.4	105.0	91.5	13.5	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
1											NO TRACKING DATA			
2	91.5	88.9	90.7	77.8	0.07	0.05	-0.10	-0.10	7.7	7.6	451.2	437.8	350.1	339.7
3	92.6	89.6	93.3	80.0	1.39	1.31	-0.47	-0.48	7.6	7.7	811.9	703.8	391.8	339.7
4	91.1	88.5	90.6	77.8	-0.33	-0.29	0.01	0.01	7.5	7.5	528.2	529.9	338.6	339.7
42	92.2	89.3	92.9	79.7	0.29	0.27	-0.10	-0.10	7.1	7.2	562.7	544.8	350.8	339.7
43	93.4	90.4	93.3	80.3	1.04	0.98	-0.29	-0.29	7.9	7.8	1097.0	1007.7	369.8	339.7
44	91.0	88.3	91.7	78.6	0.20	0.19	-0.07	-0.08	7.3	7.4	411.0	401.4	347.8	339.7
45	92.8	89.7	92.9	79.8	0.89	0.84	-0.23	-0.23	7.2	7.2	992.4	921.9	365.6	339.7
Avg.	92.1	89.2	92.2	79.2	0.51	0.48	-0.18	-0.18	7.5	7.5	693.5	649.6	359.2	339.7
Std Dv	1.0	0.8	1.3	1.2	0.67	0.63	0.18	0.18	0.3	0.3	198.5	204.4	19.6	0.0
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 130 KTS														
5	89.8	87.1	89.8	77.2	1.48	1.40	-0.50	-0.49	7.6	7.4	681.1	585.6	559.6	481.2
6	89.6	86.9	88.0	74.7	0.01	0.00	-0.09	-0.09	7.9	8.2	620.0	603.7	494.1	481.2
11	89.0	86.4	89.1	76.9	1.39	1.32	-0.44	-0.42	7.4	7.0	849.6	739.8	552.6	481.2
12											NO TRACKING DATA			
Avg.	89.4	86.8	88.9	76.3	0.96	0.91	-0.34	-0.33	7.6	7.5	716.9	643.0	535.4	481.2
Std Dv	0.6	0.6	1.2	2.0	1.17	1.11	0.31	0.30	0.4	0.9	168.2	119.2	50.9	0.0

TABLE NO. B.3-1.6

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/22/81

CORRECTION DATA

SITE: 6 SIDELINE - 284 M. NORTH JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
24	91.5	89.2	92.5	78.9	0.25	0.25	-0.09	-0.10	6.4	7.1	323.0	312.6	317.7	307.4
26	92.1	89.1	93.4	79.5	0.76	0.71	-0.22	-0.24	6.4	6.8	334.3	308.6	332.9	307.4
28	89.1	86.9	87.4	74.9	-0.30	-0.26	0.06	0.06	7.3	7.4	308.8	314.8	301.5	307.4
32	88.4	85.9	85.9	73.3	-0.17	-0.14	0.02	0.02	7.7	7.8	363.6	365.4	305.9	307.4
34	88.5	86.2	87.3	74.7	-0.10	-0.08	0.00	0.00	7.1	7.1	310.0	310.5	306.9	307.4
36	90.0	87.9	89.3	76.8	-0.05	-0.03	-0.01	-0.01	7.1	7.3	308.6	307.8	308.2	307.4
38	88.8	86.1	87.1	74.8	-0.23	-0.21	0.03	0.02	7.5	7.2	500.8	504.7	305.0	307.4
40	90.1	88.1	89.1	78.0	0.06	0.07	-0.04	-0.04	7.6	7.3	347.9	343.6	311.3	307.4
64	87.7	86.0	90.1	77.7	-0.13	-0.11	0.03	0.03	6.5	6.1	307.7	310.7	304.4	307.4
Avg.	89.6	87.3	89.1	76.5	0.01	0.02	-0.02	-0.03	7.1	7.1	345.0	342.1	310.4	307.4
Std Dv	1.6	1.4	2.7	2.3	0.35	0.32	0.09	0.10	0.6	0.5	66.0	68.5	10.3	0.0
TAKEOFF														
23											NO TRACKING DATA			
25	88.1	85.6	89.3	76.9	-1.16	-0.99	0.23	0.22	6.8	6.7	374.6	404.6	291.7	315.1
27	87.7	85.2	88.3	75.6	-1.00	-0.94	0.24	0.23	7.0	6.7	318.2	344.7	290.9	315.1
29	-	84.6	88.3	75.4	-0.85	-0.78	-	0.21	-	7.1	294.4	315.2	294.3	315.1
31	88.3	85.7	88.8	75.9	-0.86	-0.80	0.22	0.21	7.5	7.3	309.4	330.9	294.6	315.1
33	88.1	85.6	87.4	74.6	-0.92	-0.85	0.25	0.25	7.7	7.8	314.9	339.2	292.5	315.1
35	87.6	85.1	87.9	74.9	-1.09	-1.00	0.29	0.28	7.5	7.4	314.9	344.0	288.4	315.1
37	88.9	86.6	89.3	76.7	-0.80	-0.75	0.20	0.19	7.3	7.2	329.6	350.8	296.0	315.1
39											NO TRACKING DATA			
41	88.1	85.5	88.5	75.7	-0.74	-0.69	0.20	0.20	7.5	7.6	309.7	328.9	296.7	315.1
Avg.	88.1	85.5	88.5	75.7	-0.93	-0.85	0.23	0.22	7.3	7.2	320.7	344.8	293.1	315.1
Std Dv	0.4	0.6	0.7	0.8	0.16	0.12	0.03	0.03	0.3	0.4	25.8	28.8	3.0	0.0

TABLE NO. B.3-2.6

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/22/81

CORRECTION DATA

SITE: 6 SIDELINE - 284 M. NORTH JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
500 FT. FLYBY - TARGET INDICATED AIRSPEED 87 KTS														
21											NO TRACKING DATA			
22	83.7	81.0	82.6	70.0	0.08	0.08	-0.07	-0.07	7.1	6.9	342.8	335.3	328.7	321.5
46	83.4	80.6	83.2	70.2	-0.09	-0.08	0.01	0.01	7.0	6.8	334.5	335.6	320.5	321.5
47	85.3	83.1	85.1	73.1	-0.47	-0.42	0.10	0.09	6.5	6.2	482.6	499.7	310.5	321.5
Avs.	84.1	81.6	83.7	71.1	-0.16	-0.14	0.01	0.01	6.9	6.7	386.6	390.2	319.9	321.5
Std Dv	1.4	1.9	1.9	2.4	0.40	0.36	0.12	0.11	0.4	0.5	117.7	134.1	12.8	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 102 KTS														
51	84.9	82.4	83.6	71.4	0.23	0.22	-0.08	-0.07	7.6	7.3	359.6	351.3	329.1	321.5
52	83.3	80.4	82.0	69.1	-0.15	-0.14	0.03	0.03	7.1	7.2	319.6	323.1	318.0	321.5
53	85.3	82.8	83.8	70.6	0.18	0.17	-0.06	-0.06	7.4	7.7	541.5	531.8	327.4	321.5
56	-	80.2	82.4	68.8	-0.11	-0.10	-	0.02	-	7.4	324.4	326.7	319.3	321.5
Avs.	84.5	81.5	83.0	70.0	0.04	0.04	-0.04	-0.02	7.4	7.4	386.2	383.2	323.4	321.5
Std Dv	1.5	1.6	1.1	1.5	0.24	0.23	0.08	0.06	0.3	0.2	128.6	122.3	6.9	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 116 KTS														
54											NO TRACKING DATA			
55	-	83.3	84.8	72.8	0.14	0.13	-	-0.05	-	7.2	396.8	390.8	326.4	321.5
57	85.7	83.2	84.2	71.9	0.56	0.52	-0.17	-0.17	7.7	7.6	376.8	357.7	338.7	321.5
58	84.0	81.0	82.7	69.0	-0.21	-0.19	0.05	0.06	7.6	8.0	322.6	327.7	316.4	321.5
Avs.	84.8	82.5	83.9	71.2	0.16	0.15	-0.06	-0.05	7.7	7.6	365.4	358.8	327.2	321.5
Std Dv	1.2	1.8	1.6	2.8	0.55	0.50	0.16	0.16	0.1	0.6	54.3	44.6	15.8	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
17	87.3	85.0	88.3	75.5	-0.67	-0.61	0.06	0.06	6.6	6.8	948.6	968.7	314.8	321.5
18	86.7	84.0	85.5	73.0	0.23	0.27	-0.16	-0.15	7.9	7.6	598.9	571.6	336.9	321.5
19	88.1	85.6	86.6	74.5	-0.41	-0.38	0.07	0.07	8.0	7.8	345.2	352.6	314.8	321.5
20											NO TRACKING DATA			
62											NO TRACKING DATA			
63	88.8	86.3	88.0	75.7	-0.06	-0.05	0.01	0.01	7.8	7.6	356.4	357.4	320.6	321.5
Avs.	87.7	85.2	87.1	74.7	-0.23	-0.19	-0.01	-0.00	7.6	7.5	562.3	562.6	321.8	321.5
Std Dv	1.1	1.2	1.5	1.5	0.48	0.47	0.13	0.12	0.8	0.5	346.5	207.7	12.8	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 145 KTS														
48											NO TRACKING DATA			
49	91.1	88.7	94.3	81.7	-0.08	-0.06	0.00	0.00	5.6	5.5	1035.5	1034.7	321.8	321.5
50	88.8	84.7	90.2	76.6	-0.14	-0.12	0.02	0.02	6.7	6.2	810.9	816.3	319.4	321.5
59	89.3	86.8	89.2	76.6	-0.16	-0.15	0.04	0.04	7.5	7.2	337.6	341.8	317.6	321.5
60	88.7	84.8	88.7	73.5	0.09	0.08	-0.03	-0.04	7.9	8.1	629.2	622.9	324.8	321.5
61	88.9	86.4	88.6	76.6	-0.32	-0.30	0.08	0.07	7.6	6.8	400.7	410.8	313.6	321.5
Avs.	89.4	86.3	90.2	77.0	-0.12	-0.11	0.02	0.02	7.1	6.8	642.8	645.3	319.4	321.5
Std Dv	1.2	1.9	2.7	3.4	0.17	0.16	0.05	0.05	1.1	1.1	245.0	242.8	4.9	0.0

TABLE NO. B.3-3.6

AUGUSTA A-109 HELICOPTER (ITALIAN)

DOT/TSC
12/22/81

CORRECTION DATA

SITE: 6 SIDELINE - 284 M. NORTH JUNE 24,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
9	87.9	85.3	87.9	75.1	-0.27	-0.25	0.02	0.02	7.4	7.6	295.7	297.8	295.7	297.8
10	87.0	83.9	86.8	73.9	0.18	0.24	-0.14	-0.14	7.7	7.4	314.4	301.4	310.6	297.8
15	88.0	85.5	88.3	75.2	-0.25	-0.22	0.03	0.02	7.4	7.3	301.2	303.6	295.4	297.8
16	87.3	84.2	88.3	74.5	0.07	0.09	-0.10	-0.10	7.1	7.2	632.8	613.2	307.2	297.8
Avg.	87.6	84.7	87.8	74.7	-0.07	-0.04	-0.05	-0.05	7.4	7.4	386.0	379.0	302.2	297.8
Std Dv	0.6	1.0	0.9	0.7	0.28	0.29	0.10	0.10	0.3	0.2	201.7	191.3	9.6	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
7											NO TRACKING DATA			
8	86.5	83.6	85.6	72.8	0.10	0.10	-0.09	-0.09	7.3	7.2	399.2	387.9	364.6	354.3
13	86.4	83.7	86.9	74.0	-0.69	-0.63	0.12	0.12	6.9	7.0	397.4	413.5	340.5	354.3
14	86.9	84.0	86.1	72.7	0.21	0.23	-0.14	-0.14	7.1	7.4	823.9	788.1	370.4	354.3
Avg.	86.6	83.8	86.2	73.1	-0.13	-0.10	-0.04	-0.04	7.1	7.2	540.2	529.9	358.5	354.3
Std Dv	0.3	0.2	1.0	1.1	0.69	0.66	0.20	0.20	0.3	0.3	347.5	316.8	22.4	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
1											NO TRACKING DATA			
2	85.8	83.1	83.1	70.0	-0.15	-0.09	-0.08	-0.08	7.9	8.1	870.0	849.6	425.5	415.6
3	84.3	81.8	82.8	70.0	-1.55	-1.34	0.24	0.25	7.6	7.7	1379.5	1483.7	386.4	415.6
4	85.4	82.7	82.9	70.4	-0.21	-0.18	-0.02	-0.02	8.1	8.0	420.6	418.5	417.6	415.6
42											NO TRACKING DATA			
43	86.1	83.8	86.1	72.7	-0.69	-0.65	0.15	0.15	7.0	7.1	508.8	533.8	396.0	415.6
44											NO TRACKING DATA			
45	86.6	83.9	89.1	76.4	-0.54	-0.48	0.07	0.07	5.5	5.5	1312.1	1348.3	404.4	415.6
Avg.	85.7	83.1	84.8	71.9	-0.63	-0.55	0.07	0.07	7.2	7.3	898.2	926.8	406.0	415.6
Std Dv	1.0	1.0	3.2	3.2	0.65	0.57	0.15	0.15	1.2	1.2	356.2	373.6	18.3	0.0
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 130 KTS														
5	-	79.6	79.2	66.5	-1.20	-1.09	-	0.24	-	8.2	676.9	723.4	502.6	537.1
6	85.6	82.7	85.9	72.2	0.37	0.40	-0.20	-0.20	6.9	7.1	1346.8	1260.7	573.8	537.1
11	82.5	80.0	80.8	67.8	-1.29	-1.04	0.16	0.16	7.2	7.4	1137.0	1195.5	510.8	537.1
12											NO TRACKING DATA			
Avg.	84.0	80.7	82.0	68.8	-0.71	-0.58	-0.02	0.07	7.0	7.6	1053.6	1059.8	529.0	537.1
Std Dv	2.2	2.4	4.9	4.2	1.32	1.20	0.25	0.33	0.2	0.8	376.7	336.5	55.1	0.0

TABLE NO. B.4-1.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/22/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1

CENTERLINE - CENTER

JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
40	96.2	93.3	97.7	84.7	0.47	0.47	-0.18	-0.18	7.6	7.5	125.1	118.4	125.0	118.2
42	97.3	94.5	100.1	88.0	-0.61	-0.56	0.16	0.16	6.6	6.4	177.0	187.3	111.8	118.2
44	97.2	94.4	98.4	86.2	0.18	0.18	-0.07	-0.07	7.2	6.8	134.2	131.1	121.0	118.2
46	97.7	94.8	98.9	86.0	0.30	0.30	-0.10	-0.10	6.7	6.7	122.8	118.5	122.6	118.2
48	96.5	94.1	98.1	85.8	0.13	0.13	-0.05	-0.05	6.6	6.2	142.5	140.1	120.3	118.2
50											NO TRACKING DATA			
Avs.	97.0	94.2	98.6	86.2	0.09	0.10	-0.05	-0.05	6.9	6.7	140.3	139.1	120.1	118.2
Std Dv	0.7	0.7	1.1	1.4	0.48	0.45	0.15	0.15	0.5	0.6	25.4	32.9	5.8	0.0
TAKEOFF														
41	91.4	87.7	94.7	80.9	2.03	1.94	-0.64	-0.67	6.8	7.2	166.8	134.5	124.5	100.4
43	91.3	87.6	94.1	80.6	3.31	3.15	-1.09	-1.05	7.6	7.3	154.0	110.6	139.8	100.4
45											NO TRACKING DATA			
47	90.8	87.3	94.4	80.3	2.73	2.60	-0.81	-0.87	6.6	7.1	178.0	134.1	133.3	100.4
49	91.2	87.8	94.9	81.1	3.02	2.86	-0.93	-0.97	6.9	7.2	181.0	132.8	136.8	100.4
51	91.1	88.0	94.6	81.0	2.61	2.49	-0.80	-0.82	6.9	7.1	169.9	130.1	131.2	100.4
Avs.	91.2	87.7	94.6	80.8	2.74	2.61	-0.85	-0.88	7.0	7.2	169.9	128.4	133.1	100.4
Std Dv	0.3	0.3	0.3	0.4	0.56	0.52	0.19	0.17	0.4	0.1	12.3	11.7	6.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
18	88.9	86.1	91.3	78.4	-0.25	-0.22	0.03	0.03	6.9	7.0	227.3	229.2	149.9	151.2
19	88.1	85.3	92.1	78.7	0.16	0.21	-0.10	-0.10	6.1	6.5	207.4	200.1	156.7	151.2
20											NO TRACKING DATA			
21	88.3	85.4	92.1	78.9	-0.30	-0.27	0.04	0.04	6.7	6.7	225.2	228.2	149.2	151.2
22	88.8	86.2	91.7	79.1	-1.36	-1.15	0.28	0.27	6.3	6.1	180.4	199.9	136.5	151.2
23	87.9	85.2	91.0	78.0	0.73	0.73	-0.27	-0.27	7.2	7.0	231.2	211.8	165.0	151.2
Avs.	88.4	85.6	91.6	78.6	-0.20	-0.14	-0.00	-0.01	6.6	6.7	214.3	213.8	151.5	151.2
Std Dv	0.5	0.6	0.5	0.5	0.89	0.80	0.23	0.23	0.5	0.5	24.3	16.7	12.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
24											NO TRACKING DATA			
25	88.3	85.4	93.4	80.1	0.31	0.32	-0.12	-0.13	5.9	6.2	224.9	214.4	158.6	151.2
26	89.2	86.4	92.6	80.0	-0.59	-0.50	0.10	0.10	6.4	6.1	190.8	197.9	145.7	151.2
27	88.5	85.7	93.3	80.1	-0.15	-0.12	-0.01	-0.01	5.8	5.9	201.8	201.2	151.6	151.2
28	89.6	86.5	92.7	79.6	-0.50	-0.52	0.13	0.12	6.5	6.4	146.2	152.9	144.6	151.2
29	89.0	86.0	92.6	79.5	0.55	0.47	-0.17	-0.17	6.5	6.5	214.0	201.6	160.5	151.2
Avs.	88.9	86.0	92.9	79.9	-0.08	-0.07	-0.01	-0.02	6.2	6.2	195.5	193.6	152.2	151.2
Std Dv	0.6	0.5	0.4	0.3	0.57	0.53	0.15	0.15	0.4	0.3	35.1	27.3	8.4	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.4-2.1

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA - MAIN ROTOR RPM 107%

DOT/TSC
12/22/81

SITE: 1 CENTERLINE - CENTER JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
10	94.2	91.1	100.0	86.9	2.24	2.12	-0.59	-0.57	5.9	5.7	162.1	128.9	113.5	90.2
11	94.1	91.1	101.1	87.8	2.67	2.52	-0.62	-0.67	5.3	5.7	168.7	129.0	118.0	90.2
16	94.6	91.3	100.1	86.4	0.33	0.34	-0.11	-0.12	5.7	6.1	127.6	122.0	94.4	90.2
17											NO TRACKING DATA			
Avs.	94.3	91.2	100.4	87.0	1.75	1.66	-0.44	-0.45	5.6	5.8	152.8	126.6	108.6	90.2
Std Dv	0.4	0.1	0.8	0.9	1.76	1.64	0.40	0.41	0.4	0.3	31.2	5.7	17.7	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
8	89.7	87.4	92.4	80.4	0.14	0.18	-0.10	-0.10	6.8	6.6	306.7	296.0	219.8	212.1
9	88.2	85.7	91.3	79.3	1.15	1.09	-0.36	-0.36	6.9	6.8	302.8	268.4	239.4	212.1
14	88.4	85.9	90.6	78.4	0.36	0.40	-0.17	-0.17	6.9	6.9	306.9	290.0	224.5	212.1
15	86.9	84.3	90.1	77.7	0.64	0.64	-0.22	-0.24	6.5	6.8	336.6	310.8	229.8	212.1
Avs.	88.3	85.8	91.1	78.9	0.57	0.58	-0.21	-0.22	6.8	6.8	313.3	291.3	228.4	212.1
Std Dv	1.4	1.5	1.2	1.4	0.53	0.48	0.13	0.14	0.3	0.2	19.2	21.6	10.3	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
1	86.0	83.5	87.7	75.7	1.01	0.95	-0.34	-0.34	7.2	7.2	424.5	381.2	338.1	303.6
2	86.8	84.5	86.8	75.2	0.17	0.16	-0.12	-0.11	7.3	6.9	451.6	434.8	315.3	303.6
3	85.9	83.8	87.6	76.7	0.45	0.46	-0.21	-0.18	7.3	6.4	461.4	432.2	324.1	303.6
4	86.9	84.7	87.9	76.3	0.45	0.48	-0.21	-0.20	7.4	7.0	407.5	381.8	324.0	303.6
52	86.4	84.4	87.2	75.5	0.58	0.55	-0.19	-0.18	7.2	7.0	378.5	356.6	322.3	303.6
53	84.3	82.4	86.5	74.4	0.98	0.94	-0.27	-0.28	6.8	6.9	489.7	446.3	333.1	303.6
54	87.7	85.4	89.5	77.6	1.60	1.33	-0.31	-0.29	6.5	6.2	964.1	865.0	338.4	303.6
55	85.4	83.4	87.6	76.1	0.26	0.27	-0.11	-0.10	7.2	6.9	434.4	419.9	314.1	303.6
Avs.	86.2	84.0	87.6	75.9	0.69	0.64	-0.22	-0.21	7.1	6.8	501.5	464.7	326.2	303.6
Std Dv	1.1	1.0	1.0	1.1	0.52	0.43	0.09	0.09	0.3	0.4	80.2	178.0	10.2	0.0

TABLE NO. B.4-3.1

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/22/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1 CENTERLINE - CENTER JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	81.9	80.0	82.4	70.6	0.69	0.67	-0.27	-0.27	7.3	7.4	813.2	747.3	496.2	456.0
6											NO TRACKING DATA			
7	81.9	80.3	82.5	71.0	0.75	0.74	-0.28	-0.29	7.3	7.4	563.9	515.5	498.8	456.0
12											NO TRACKING DATA			
13	81.2	79.5	82.1	70.9	0.31	0.33	-0.19	-0.19	7.3	7.2	648.6	611.0	484.1	456.0
38	82.9	81.2	82.5	71.5	0.14	0.11	-0.12	-0.12	7.4	7.2	644.4	620.2	473.7	456.0
39	81.5	80.0	81.9	70.2	0.21	0.22	-0.16	-0.15	7.6	7.6	787.0	750.9	477.9	456.0
Avg.	81.9	80.2	82.3	70.8	0.42	0.41	-0.20	-0.20	7.4	7.4	691.4	649.0	486.1	456.0
Std Dv	0.7	0.7	0.3	0.6	0.32	0.32	0.08	0.09	0.2	0.2	121.5	115.7	12.7	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
34	81.2	79.3	80.6	69.4	-0.02	-0.13	-0.07	-0.07	7.4	7.4	723.9	709.3	620.9	608.4
35	80.0	78.5	79.9	69.1	-0.09	-0.09	-0.09	-0.09	7.2	7.0	849.2	825.5	625.8	608.4
36	-	78.5	79.3	68.1	0.18	0.13	-	-0.14	-	7.2	846.4	810.2	635.5	608.4
37	79.5	77.7	78.8	67.9	0.29	0.27	-0.19	-0.19	7.6	7.4	1105.9	1043.5	644.8	608.4
Avg.	80.3	78.5	79.7	68.6	0.09	0.05	-0.12	-0.12	7.4	7.2	881.3	847.1	631.8	608.4
Std Dv	1.2	0.8	1.0	0.9	0.22	0.23	0.09	0.07	0.3	0.2	116.3	102.1	13.0	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
30											NO TRACKING DATA			
31	-	75.4	75.5	64.0	0.37	0.03	-	-0.12	-	7.7	926.8	894.6	788.2	760.8
32	79.3	77.4	77.3	66.3	-0.01	-0.39	-0.03	-0.03	7.8	7.3	1029.6	1020.4	767.6	760.8
33	-	75.4	76.3	65.4	0.42	0.09	-	-0.13	-	7.0	1290.3	1236.7	793.7	760.8
Avg.	79.3	76.1	76.4	65.2	0.26	-0.09	-0.03	-0.09	7.8	7.3	1082.2	1050.6	783.2	760.8
Std Dv	-	1.6	1.3	1.6	0.33	0.37	-	0.08	-	0.5	155.4	155.9	19.5	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.5-2.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/23/81

SITE: 1

CENTERLINE - CENTER

JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
56	100.3	96.5	104.7	91.4	0.81	0.78	-0.25	-0.25	6.7	6.6	153.1	140.5	98.3	90.2
57	99.7	95.8	104.3	90.9	0.87	0.83	-0.22	-0.23	5.7	6.0	139.5	127.6	98.7	90.2
58	101.0	97.5	106.0	92.4	1.28	1.23	-0.37	-0.41	6.6	7.1	254.0	222.7	102.9	90.2
59	99.4	95.8	103.3	90.0	0.97	0.94	-0.30	-0.31	6.8	7.0	173.0	156.3	99.9	90.2
Avg.	100.1	96.4	104.6	91.2	0.98	0.94	-0.28	-0.30	6.4	6.7	179.9	161.8	99.9	90.2
Std Dv	0.8	1.0	1.4	1.2	0.26	0.25	0.08	0.10	0.6	0.6	62.8	51.8	2.6	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
60	95.4	92.4	97.4	85.1	0.42	0.40	-0.15	-0.13	7.6	7.1	347.3	332.4	221.7	212.1
61											NO TRACKING DATA			
62	94.2	90.9	96.0	83.8	0.59	0.56	-0.18	-0.16	6.8	6.0	228.3	215.0	225.2	212.1
63	94.8	91.8	95.7	82.7	-0.03	-0.02	-0.01	-0.01	7.7	7.9	409.6	408.8	212.5	212.1
Avg.	94.8	91.7	96.4	83.9	0.33	0.31	-0.11	-0.10	7.4	7.0	328.4	318.7	219.8	212.1
Std Dv	0.9	1.1	1.2	1.7	0.45	0.42	0.13	0.11	0.7	1.4	130.2	138.0	9.3	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
64	92.4	89.5	93.9	81.1	-0.19	-0.17	0.03	0.03	6.9	6.9	548.2	554.3	300.2	303.6
65											NO TRACKING DATA			
66	91.2	88.3	91.0	78.6	-0.04	-0.02	-0.01	-0.01	7.6	7.3	335.3	334.6	304.2	303.6
67	91.2	88.4	91.6	77.7	-0.10	-0.10	0.02	0.02	7.4	8.1	396.4	398.6	301.9	303.6
Avg.	91.6	88.7	92.2	79.1	-0.11	-0.10	0.01	0.01	7.3	7.4	426.6	429.2	302.1	303.6
Std Dv	1.0	1.0	2.2	2.5	0.11	0.11	0.03	0.03	0.5	0.9	155.0	159.8	2.8	0.0

DOT/TSC
12/23/81

TABLE NO. B.5-3.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

SITE: 1 CENTERLINE - CENTER JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
68	87.7	84.9	87.4	74.3	-0.01	-0.01	-0.01	-0.01	7.8	7.9	1139.1	1134.2	457.9	456.0
69	90.2	87.3	92.0	79.4	0.85	0.78	-0.19	-0.19	6.2	6.2	1252.8	1167.5	489.3	456.0
70	89.8	86.5	88.8	75.9	0.12	0.12	-0.05	-0.05	7.6	7.4	850.1	838.1	462.5	456.0
71	90.7	87.2	90.6	78.3	0.56	0.51	-0.14	-0.14	6.6	6.9	1245.3	1187.8	478.1	456.0
Avg.	89.6	86.5	89.7	77.0	0.38	0.35	-0.10	-0.10	7.0	7.1	1121.8	1081.9	471.9	456.0
Std Dv	1.6	1.4	2.5	2.8	0.49	0.44	0.10	0.10	0.9	0.9	192.1	172.4	17.7	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
72											NO TRACKING DATA			
73	86.4	83.9	84.6	71.6	0.12	0.11	-0.05	-0.05	7.7	7.9	1202.6	1185.9	616.9	608.4
74	-	83.9	85.9	73.9	0.21	0.20	-	-0.06	-	6.6	1109.2	1086.3	621.2	608.4
57											NO TRACKING DATA			
Avg.	86.4	83.9	85.2	72.8	0.16	0.15	-0.05	-0.05	7.7	7.3	1155.9	1136.1	619.0	608.4
Std Dv	-	0.0	0.9	1.6	0.06	0.06	-	0.01	-	0.9	0.0	0.0	3.0	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
76	87.0	84.8	85.1	73.4	0.39	0.35	-0.10	-0.09	7.6	7.2	886.4	859.9	784.2	760.8
77											NO TRACKING DATA			
Avg.	87.0	84.8	85.1	73.4	0.39	0.35	-0.10	-0.09	7.6	7.2	886.4	859.9	784.2	760.8
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BEST DOCUMENT AVAILABLE

TABLE NO. B.4-1.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
40	100.6	97.6	101.4	88.8	0.46	0.46	-0.19	-0.18	7.9	7.5	126.3	119.6	126.2	119.4
42	101.8	98.9	103.9	92.0	-0.60	-0.57	0.17	0.15	7.1	6.4	166.9	176.4	113.0	119.4
44	101.5	98.5	103.0	90.9	0.18	0.18	-0.07	-0.07	7.1	6.8	142.4	139.1	122.2	119.4
46	101.4	98.6	102.7	89.7	0.30	0.30	-0.11	-0.11	7.2	7.0	124.0	119.7	123.8	119.4
48	100.7	97.9	102.3	89.7	0.12	0.13	-0.05	-0.05	6.9	6.6	143.7	141.2	121.5	119.4
50											NO TRACKING DATA			
Avs.	101.2	98.3	102.7	90.2	0.09	0.10	-0.05	-0.05	7.2	6.9	140.7	139.2	121.3	119.4
Std Dv	0.6	0.6	1.0	1.4	0.47	0.46	0.15	0.14	0.4	0.5	19.8	26.8	5.8	0.0
TAKEOFF														
41	95.8	92.0	98.6	84.6	2.00	1.94	-0.69	-0.71	7.4	7.6	142.6	115.3	125.7	101.6
43	96.2	92.4	99.3	85.9	3.26	3.13	-1.03	-1.01	7.2	7.1	155.0	111.7	141.0	101.6
45											NO TRACKING DATA			
47	95.5	91.9	98.7	85.1	2.71	2.63	-0.83	-0.84	6.9	6.9	163.5	123.6	134.5	101.6
49	96.1	92.4	99.2	85.6	3.06	2.86	-0.96	-0.97	7.2	7.3	145.9	107.4	138.0	101.6
51	95.9	92.5	99.1	85.5	2.65	2.48	-0.79	-0.82	6.9	7.1	145.5	111.7	132.4	101.6
Avs.	95.9	92.2	99.0	85.3	2.74	2.61	-0.86	-0.87	7.1	7.2	150.5	113.9	134.3	101.6
Std Dv	0.3	0.3	0.4	0.6	0.56	0.52	0.16	0.14	0.3	0.3	10.0	7.0	6.7	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
18	93.6	90.7	95.5	82.9	-0.28	-0.20	0.03	0.03	7.2	7.0	164.9	166.3	151.1	152.4
19	91.8	89.1	95.8	82.8	0.15	0.20	-0.09	-0.10	6.1	6.4	235.5	227.2	158.0	152.4
20											NO TRACKING DATA			
21	92.0	89.4	95.3	83.1	-0.39	-0.28	0.04	0.04	6.7	6.8	226.5	229.5	150.4	152.4
22	93.1	90.1	96.1	83.6	-1.33	-1.15	0.27	0.27	6.2	6.1	181.4	200.7	137.7	152.4
23	91.9	89.4	95.0	82.6	0.73	0.72	-0.27	-0.26	7.1	7.0	232.0	212.7	166.2	152.4
Avs.	92.5	89.8	95.5	83.0	-0.22	-0.14	-0.00	-0.00	6.7	6.7	208.1	207.3	152.7	152.4
Std Dv	0.9	0.8	0.5	0.4	0.88	0.80	0.23	0.23	0.6	0.5	37.6	29.7	12.1	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
24											NO TRACKING DATA			
25	92.7	90.1	98.0	85.1	0.30	0.32	-0.12	-0.12	5.7	6.0	225.8	215.3	159.8	152.4
26	93.6	90.7	97.1	84.1	-0.57	-0.49	0.10	0.10	6.4	6.4	173.8	180.2	147.0	152.4
27	92.8	90.2	97.4	84.8	-0.15	-0.12	-0.01	-0.01	5.7	5.8	203.2	202.7	152.8	152.4
28	93.8	90.8	97.1	83.9	-0.60	-0.55	0.12	0.12	6.3	6.4	159.7	166.9	145.8	152.4
29	92.9	90.2	97.7	84.6	0.51	0.45	-0.15	-0.16	5.9	6.3	214.9	202.6	161.7	152.4
Avs.	93.2	90.4	97.5	84.5	-0.10	-0.08	-0.01	-0.01	6.0	6.2	195.5	193.5	153.4	152.4
Std Dv	0.6	0.4	0.4	0.6	0.58	0.53	0.14	0.15	0.4	0.3	32.2	22.6	8.3	0.0

TABLE NO. B.4-2.16

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 16 CENTERLINE - CENTER (FLUSH) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
10	98.0	94.8	103.7	90.7	2.20	2.09	-0.57	-0.56	5.8	5.7	163.0	129.9	114.7	91.4
11	97.9	94.9	104.4	91.7	2.62	2.46	-0.60	-0.63	5.2	5.5	169.6	130.1	119.2	91.4
16	99.0	95.6	104.7	91.1	0.32	0.33	-0.11	-0.11	5.7	5.9	128.5	122.9	95.6	91.4
17											NO TRACKING DATA			-
Avg.	98.3	95.1	104.3	91.2	1.71	1.63	-0.43	-0.43	5.6	5.7	153.7	127.6	109.9	91.4
Std Dv	0.9	0.6	0.7	0.7	1.73	1.61	0.39	0.40	0.4	0.3	31.2	5.8	17.7	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
8	93.6	91.2	96.3	84.7	0.13	0.17	-0.10	-0.10	6.8	6.4	307.6	296.9	221.0	213.4
9	92.0	89.7	96.1	83.8	1.12	1.08	-0.32	-0.33	6.2	6.4	303.8	269.4	240.6	213.4
14	92.6	90.2	95.3	83.0	0.37	0.39	-0.16	-0.16	6.7	6.6	307.8	291.0	225.7	213.4
15	91.4	88.9	95.6	83.0	0.64	0.63	-0.21	-0.22	5.9	6.4	337.5	311.7	231.0	213.4
Avg.	92.4	90.0	95.8	83.6	0.56	0.57	-0.20	-0.20	6.4	6.4	314.2	292.2	229.6	213.4
Std Dv	1.2	1.2	0.6	1.0	0.52	0.48	0.11	0.12	0.5	0.1	19.2	21.5	10.3	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
1	89.3	87.2	91.9	79.9	0.99	0.95	-0.31	-0.32	6.7	6.9	425.9	382.6	339.3	304.8
2	90.1	87.8	91.4	79.5	0.08	0.15	-0.11	-0.11	6.7	6.9	452.4	435.7	316.5	304.8
3	89.3	87.4	92.0	80.4	0.47	0.48	-0.19	-0.18	6.6	6.3	427.8	400.8	325.3	304.8
4	90.8	88.7	92.3	80.6	0.46	0.47	-0.20	-0.19	7.0	6.9	431.5	404.4	325.2	304.8
52	90.9	88.8	92.8	80.4	0.58	0.54	-0.18	-0.18	7.0	7.0	345.9	325.9	323.5	304.8
53	89.0	87.2	91.2	79.4	1.03	0.93	-0.27	-0.27	6.8	6.8	491.1	447.7	334.3	304.8
54	92.3	89.9	94.8	82.5	1.58	1.36	-0.30	-0.29	6.5	6.2	964.6	865.8	339.6	304.8
55	90.0	88.2	93.4	81.5	0.27	0.27	-0.09	-0.10	6.4	6.5	401.8	388.4	315.3	304.8
Avg.	90.2	88.1	92.5	80.5	0.68	0.64	-0.21	-0.20	6.7	6.7	492.6	456.4	327.4	304.8
Std Dv	1.2	1.0	1.3	1.1	0.53	0.44	0.09	0.09	0.3	0.3	85.4	183.0	10.2	0.0

TABLE NO. B.4-3.1G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	85.8	83.9	87.1	74.9	0.67	0.66	-0.25	-0.26	6.8	7.2	699.6	643.0	497.4	457.2
6											NO TRACKING DATA			
7	86.2	84.4	87.8	75.8	0.75	0.73	-0.26	-0.27	6.8	7.0	644.6	589.4	500.0	457.2
12											NO TRACKING DATA			
13	85.7	84.1	87.5	75.8	0.32	0.36	-0.18	-0.18	7.1	7.0	618.2	582.5	485.3	457.2
38	87.5	85.8	88.0	76.4	0.07	0.11	-0.12	-0.11	7.1	6.9	617.7	594.6	475.0	457.2
39	85.9	84.6	87.2	75.5	0.18	0.23	-0.14	-0.15	7.0	7.3	560.3	534.6	479.1	457.2
Avs.	86.2	84.5	87.5	75.7	0.40	0.42	-0.19	-0.19	7.0	7.1	628.1	588.8	487.4	457.2
Std Dv	0.8	0.9	0.4	0.6	0.35	0.31	0.07	0.08	0.2	0.2	58.3	44.5	12.7	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
34	85.8	83.8	85.7	74.4	-0.16	-0.19	-0.06	-0.06	7.3	7.2	769.4	754.0	622.1	609.6
35	84.4	82.9	85.4	74.4	-0.11	-0.07	-0.08	-0.08	6.6	6.7	819.0	796.2	627.1	609.6
36	84.9	82.9	84.2	72.4	0.20	0.12	-0.13	-0.14	7.1	7.2	847.3	811.2	636.7	609.6
37	84.4	82.6	84.2	73.2	0.37	0.35	-0.19	-0.18	7.6	7.3	737.2	695.6	646.0	609.6
Avs.	84.8	83.1	84.9	73.6	0.07	0.05	-0.11	-0.11	7.2	7.1	793.2	764.2	633.0	609.6
Std Dv	0.8	0.6	1.0	1.2	0.31	0.29	0.07	0.07	0.5	0.3	60.4	63.4	13.0	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
30											NO TRACKING DATA			
31	81.4	79.6	80.2	68.7	0.22	-0.04	-0.12	-0.12	7.5	7.5	1009.9	974.8	789.4	762.0
32	83.7	81.7	82.4	71.5	-0.02	-0.39	-0.03	-0.03	7.3	7.0	983.0	974.3	768.8	762.0
33	82.4	80.2	81.6	70.3	0.31	0.09	-0.13	-0.13	7.2	6.9	1005.7	964.0	795.0	762.0
Avs.	82.5	80.5	81.4	70.2	0.17	-0.11	-0.09	-0.09	7.4	7.2	999.5	971.0	784.4	762.0
Std Dv	1.7	1.6	1.6	2.0	0.24	0.35	0.08	0.08	0.2	0.4	0.0	0.0	19.5	0.0

TABLE NO. B.5-2.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 1G   CENTERLINE - CENTER (FLUSH)   JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
56	104.1	100.4	108.8	96.0	0.78	0.76	-0.24	-0.22	6.5	6.0	119.2	109.6	99.5	91.4
57	103.6	99.8	108.8	95.3	0.85	0.82	-0.22	-0.22	5.7	5.7	140.9	129.0	99.9	91.4
58	105.0	101.4	110.5	96.2	1.25	1.21	-0.35	-0.39	6.3	6.9	204.4	179.6	104.1	91.4
59	103.3	99.4	107.7	94.2	0.95	0.93	-0.26	-0.28	6.5	6.5	173.7	157.2	101.1	91.4
Avg.	104.0	100.2	108.9	95.4	0.96	0.93	-0.27	-0.28	6.3	6.3	159.6	143.8	101.1	91.4
Std Dv	0.9	1.1	1.4	1.1	0.25	0.24	0.07	0.10	0.4	0.6	45.7	37.7	2.5	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
60	99.7	96.5	102.5	90.2	0.40	0.39	-0.14	-0.12	7.2	6.5	223.7	214.2	222.8	213.4
61											NO TRACKING DATA			
62	98.8	94.8	101.2	88.6	0.57	0.55	-0.17	-0.16	6.4	6.3	229.5	216.2	226.4	213.4
63	99.1	95.5	100.6	86.6	-0.03	-0.03	-0.01	-0.01	7.3	7.7	410.2	409.4	213.8	213.4
Avg.	99.2	95.6	101.4	88.5	0.31	0.30	-0.11	-0.10	7.0	6.8	287.8	279.9	221.0	213.4
Std Dv	0.7	1.2	1.4	2.6	0.44	0.42	0.12	0.11	0.7	1.1	149.9	158.6	9.2	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
64	96.3	93.0	97.9	84.7	-0.17	-0.16	0.03	0.03	7.0	6.8	461.1	466.3	301.4	304.8
65											NO TRACKING DATA			
66	95.7	92.4	96.5	83.5	-0.02	-0.02	-0.01	-0.01	7.0	6.8	359.4	358.6	305.4	304.8
67	95.4	92.2	95.8	81.6	-0.10	-0.10	0.02	0.02	7.5	7.7	424.2	426.6	303.1	304.8
Avg.	95.8	92.5	96.7	83.3	-0.10	-0.09	0.01	0.01	7.2	7.1	414.9	417.2	303.3	304.8
Std Dv	0.7	0.6	1.6	2.2	0.11	0.10	0.03	0.03	0.4	0.8	72.9	77.0	2.8	0.0

TABLE NO. B.5-3.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		TRACKING DATA (METERS) (REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
68	92.5	89.1	91.7	78.7	0.01	0.01	-0.02	-0.01	8.2	7.9	553.9	551.6	459.1	457.2
69	94.1	90.8	94.1	81.0	0.84	0.78	-0.22	-0.22	7.3	7.2	1253.2	1168.3	490.4	457.2
70	94.0	90.5	92.9	79.8	0.12	0.12	-0.05	-0.05	7.8	7.6	557.0	549.2	463.7	457.2
71	94.1	90.5	93.9	81.0	-0.23	-0.20	0.04	0.04	6.6	7.1	936.9	949.5	451.2	457.2
Avs.	93.7	90.2	93.2	80.2	0.18	0.18	-0.06	-0.06	7.5	7.4	825.3	804.6	466.1	457.2
Std Dv	1.0	0.9	1.3	1.4	0.56	0.52	0.14	0.14	0.8	0.4	281.1	274.1	20.8	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
72												NO TRACKING DATA		
73	90.5	87.7	88.6	76.0	0.11	0.10	-0.04	-0.04	7.8	7.6	805.5	795.1	617.5	609.6
74	-	87.8	89.8	77.3	0.21	0.20	-	-0.06	-	7.0	1109.8	1087.0	622.4	609.6
75	91.2	88.0	89.6	76.7	0.06	0.06	-0.03	-0.03	7.5	7.2	824.3	816.7	615.3	609.6
Avs.	90.8	87.8	89.3	76.7	0.13	0.12	-0.03	-0.04	7.6	7.2	913.2	899.6	618.4	609.6
Std Dv	0.5	0.2	0.9	0.9	0.11	0.10	0.01	0.02	0.2	0.4	139.7	133.4	5.2	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
76	89.4	86.4	87.1	74.7	0.33	0.31	-0.10	-0.10	7.9	7.3	786.6	763.2	785.4	762.0
77												NO TRACKING DATA		
Avs.	89.4	86.4	87.1	74.7	0.33	0.31	-0.10	-0.10	7.9	7.3	786.6	763.2	785.4	762.0
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.4-1.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
40	96.6	93.5	97.6	84.2	0.50	0.50	-0.20	-0.20	7.7	7.9	139.6	131.6	116.2	109.5
42	99.7	97.0	101.7	89.3	-0.65	-0.61	0.19	0.18	7.0	6.9	147.6	157.0	103.0	109.5
44	99.6	96.7	101.2	88.3	0.19	0.20	-0.08	-0.08	7.0	6.9	141.7	138.2	112.3	109.5
46	99.6	96.8	100.5	87.8	0.33	0.32	-0.12	-0.12	7.1	7.1	113.9	109.7	113.8	109.5
48	99.1	96.1	101.4	87.9	0.14	0.14	-0.05	-0.05	6.4	6.6	120.2	118.1	111.5	109.5
50											NO TRACKING DATA			
Avg.	98.9	96.0	100.5	87.5	0.10	0.11	-0.05	-0.05	7.0	7.1	132.6	130.9	111.4	109.5
Std Dv	1.5	1.7	1.9	2.2	0.51	0.49	0.17	0.16	0.5	0.6	16.9	21.2	5.8	0.0
TAKEOFF														
41	94.2	90.1	97.8	82.9	2.21	2.15	-0.71	-0.77	7.0	7.6	146.9	116.4	115.8	91.7
43	93.7	89.9	97.0	83.3	3.43	3.33	-1.14	-1.11	7.3	7.2	143.3	100.2	131.1	91.7
45											NO TRACKING DATA			
47	93.4	89.8	97.1	82.9	2.96	2.87	-0.97	-0.96	7.3	7.2	144.1	105.9	124.7	91.7
49	93.6	90.0	97.4	83.2	3.27	3.09	-1.06	-1.08	7.3	7.4	175.6	125.6	128.2	91.7
51	93.6	90.1	97.3	83.4	2.79	2.70	-0.90	-0.92	7.2	7.3	137.1	102.6	122.6	91.7
Avg.	93.7	90.0	97.3	83.2	2.93	2.83	-0.96	-0.97	7.2	7.3	149.4	110.1	124.5	91.7
Std Dv	0.4	0.2	0.4	0.3	0.55	0.52	0.19	0.16	0.2	0.2	17.4	12.3	6.8	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
18	89.8	86.9	91.9	78.4	-0.30	-0.21	0.03	0.03	6.9	6.9	168.1	169.6	141.1	142.3
19	88.6	85.7	93.1	79.7	0.21	0.24	-0.10	-0.10	5.9	6.1	200.0	192.4	148.0	142.3
20											NO TRACKING DATA			
21	88.9	86.1	92.9	79.9	-0.37	-0.27	0.04	0.04	6.4	6.4	190.4	192.9	140.5	142.3
22	89.5	86.5	92.1	78.7	-1.41	-1.22	0.31	0.32	6.6	6.8	173.1	193.0	127.7	142.3
23	88.9	85.9	92.4	79.4	0.80	0.79	-0.27	-0.27	6.7	6.6	224.1	204.1	156.3	142.3
Avg.	89.1	86.2	92.5	79.2	-0.21	-0.13	0.00	0.00	6.5	6.5	191.1	190.4	142.7	142.3
Std Dv	0.6	0.6	0.6	0.7	0.94	0.86	0.25	0.25	0.4	0.3	25.9	14.6	12.2	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
24											NO TRACKING DATA			
25	89.3	86.3	94.6	81.4	0.35	0.36	-0.12	-0.13	5.6	5.8	217.7	206.9	149.8	142.3
26	90.0	87.2	93.8	80.1	-0.61	-0.52	0.11	0.11	6.3	6.3	183.3	190.5	136.9	142.3
27	89.2	86.5	94.2	81.4	-0.13	-0.10	-0.01	-0.01	5.8	5.6	194.3	193.7	142.8	142.3
28	90.3	87.3	93.6	79.9	-0.63	-0.58	0.13	0.14	6.4	6.6	164.7	172.7	135.8	142.3
29	89.4	86.3	93.7	80.2	0.62	0.53	-0.18	-0.18	6.2	6.4	206.7	193.7	151.9	142.3
Avg.	89.7	86.7	94.0	80.6	-0.08	-0.06	-0.01	-0.01	6.0	6.2	193.3	191.5	143.4	142.3
Std Dv	0.5	0.6	0.5	0.9	0.65	0.58	0.16	0.16	0.4	0.5	23.8	14.1	8.4	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.4-2.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1H   CENTERLINE - CENTER (10-METER)   JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
10	94.8	91.4	100.8	87.1	2.47	2.32	-0.62	-0.63	5.7	5.7	155.0	120.6	104.6	81.4
11	94.6	91.5	101.3	88.2	3.00	2.79	-0.70	-0.68	5.5	5.3	200.7	149.6	109.2	81.4
16	95.5	92.1	101.4	87.6	0.39	0.41	-0.13	-0.14	5.4	6.0	151.1	143.3	85.8	81.4
17											NO TRACKING DATA			
Avg.	95.0	91.6	101.2	87.6	1.95	1.84	-0.48	-0.48	5.5	5.7	169.0	137.8	99.9	81.4
Std Dv	0.6	0.5	0.5	0.8	1.95	1.78	0.44	0.42	0.2	0.5	39.0	21.6	17.5	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
8	89.9	87.2	93.0	80.2	0.21	0.20	-0.11	-0.11	6.5	6.6	299.4	288.5	211.0	203.3
9	88.1	85.8	92.1	79.4	1.21	1.14	-0.34	-0.36	6.2	6.6	295.0	260.0	230.7	203.3
14	89.5	86.8	92.1	79.1	0.45	0.43	-0.17	-0.18	6.6	6.8	299.6	282.4	215.7	203.3
15	87.6	85.2	91.3	78.9	0.69	0.68	-0.23	-0.24	6.4	6.5	294.3	270.7	221.0	203.3
Avg.	88.8	86.3	92.1	79.4	0.64	0.61	-0.21	-0.22	6.4	6.7	297.1	275.4	219.6	203.3
Std Dv	1.3	1.1	0.8	0.7	0.52	0.49	0.12	0.13	0.2	0.1	3.4	15.5	10.4	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
1	85.8	83.4	88.2	75.8	1.05	0.99	-0.32	-0.34	6.7	7.0	485.0	434.2	329.2	294.7
2	86.2	84.2	87.2	74.9	0.22	0.20	-0.12	-0.12	6.8	7.0	417.7	401.7	306.4	294.7
3	85.9	83.9	88.0	76.7	0.47	0.50	-0.20	-0.19	6.9	6.5	419.2	392.0	315.2	294.7
4	87.2	84.8	88.7	76.0	0.54	0.50	-0.20	-0.21	6.9	7.2	423.0	395.6	315.2	294.7
52	88.3	86.5	89.6	78.0	0.60	0.57	-0.18	-0.18	6.8	6.7	393.4	369.9	313.5	294.7
53	86.4	84.8	89.0	77.9	1.03	0.97	-0.26	-0.25	6.4	6.1	520.6	473.1	324.4	294.7
54	90.3	87.8	92.3	79.6	2.20	1.78	-0.40	-0.41	6.6	6.8	998.9	868.4	339.0	294.7
55	87.0	85.4	90.0	78.4	0.29	0.28	-0.10	-0.10	6.7	6.7	464.9	448.9	305.2	294.7
Avg.	87.1	85.1	89.1	77.2	0.80	0.72	-0.22	-0.22	6.7	6.7	515.3	473.0	318.5	294.7
Std Dv	1.6	1.6	1.7	1.7	0.69	0.55	0.11	0.11	0.2	0.4	87.2	176.4	12.5	0.0

TABLE NO. B.4-3.1H

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	81.9	79.9	83.2	70.7	0.74	0.69	-0.25	-0.27	6.7	7.2	691.2	634.2	487.4	447.1
6											NO TRACKING DATA			
7	82.3	80.6	83.4	72.3	0.78	0.75	-0.28	-0.26	7.1	6.6	635.7	580.1	489.9	447.1
12											NO TRACKING DATA			
13											NO TRACKING DATA			
38	-	82.0	84.0	72.2	0.19	0.16	-	-0.12	-	7.3	583.6	561.2	464.9	447.1
39	82.2	80.6	82.9	71.5	0.26	0.27	-0.15	-0.15	7.1	7.0	576.4	549.4	469.1	447.1
Avs.	82.1	80.8	83.4	71.7	0.49	0.47	-0.23	-0.20	7.0	7.0	621.7	581.2	477.8	447.1
Std Dv	0.3	1.1	0.5	0.9	0.38	0.36	0.10	0.09	0.3	0.4	65.3	45.9	15.5	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
34	81.7	79.7	81.2	69.3	0.00	-0.15	-0.06	-0.07	7.1	7.4	789.2	773.1	612.0	599.5
35	81.0	79.2	81.7	69.7	0.05	-0.04	-0.08	-0.09	6.6	7.1	841.6	817.8	617.0	599.5
36	-	79.4	80.9	68.1	0.23	0.17	-	-0.14	-	7.4	899.5	860.5	626.7	599.5
37	80.7	78.6	81.2	68.8	0.40	0.35	-0.18	-0.18	7.0	7.2	871.0	821.1	635.9	599.5
Avs.	81.1	79.2	81.3	69.0	0.17	0.08	-0.11	-0.12	6.9	7.2	850.3	818.1	622.9	599.5
Std Dv	0.7	0.6	0.4	0.9	0.22	0.27	0.09	0.06	0.3	0.2	57.7	43.8	13.0	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
30											NO TRACKING DATA			
31	-	76.1	77.9	65.7	0.41	-0.01	-	-0.11	-	7.2	1062.3	1024.9	779.4	751.9
32	-	78.0	78.4	66.1	0.16	-0.32	-	-0.03	-	7.6	995.6	986.7	758.7	751.9
33	-	76.6	77.3	65.0	0.47	0.14	-	-0.14	-	7.7	1059.1	1014.6	784.9	751.9
Avs.	-	76.9	77.9	65.6	0.35	-0.06	-	-0.09	-	7.5	1039.0	1008.7	774.3	751.9
Std Dv	-	1.4	0.8	0.8	0.23	0.33	-	0.08	-	0.4	0.0	0.0	19.5	0.0

TABLE NO. B.5-2.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/23/81

SITE: 1H   CENTERLINE - CENTER (10-METER)   JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
56	102.3	98.4	106.9	93.1	0.91	0.88	-0.26	-0.26	6.3	6.3	193.0	175.2	89.6	81.4
57	101.7	97.7	106.4	92.8	0.96	0.92	-0.27	-0.27	6.2	6.2	132.4	119.9	89.9	81.4
58	103.0	99.4	106.3	94.5	1.41	1.36	-0.41	-0.43	6.4	6.8	198.1	171.1	94.3	81.4
59	101.7	97.6	106.2	91.8	1.07	1.03	-0.30	-0.33	6.2	6.8	167.0	149.3	91.0	81.4
Avs.	102.2	98.3	106.9	93.1	1.09	1.05	-0.31	-0.32	6.3	6.5	172.6	153.9	91.2	81.4
Std Dv	0.8	1.0	1.2	1.4	0.28	0.27	0.08	0.10	0.1	0.4	36.9	31.1	2.6	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
60	97.6	94.2	100.3	86.7	0.45	0.43	-0.15	-0.15	7.1	7.2	300.3	286.4	213.2	203.3
61											NO TRACKING DATA			
62	96.8	92.9	98.4	85.5	0.62	0.59	-0.19	-0.17	7.1	6.2	219.4	205.9	216.6	203.3
63	97.5	93.8	99.4	85.2	-0.03	-0.02	-0.01	-0.01	7.1	7.4	403.9	403.1	203.7	203.3
Avs.	97.3	93.6	99.3	85.8	0.35	0.33	-0.12	-0.11	7.1	6.9	307.9	298.5	211.2	203.3
Std Dv	0.6	0.9	1.4	1.1	0.48	0.45	0.13	0.12	0.0	0.9	130.8	140.2	9.5	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
64	94.4	91.1	96.0	81.9	-0.17	-0.16	0.03	0.04	6.9	7.3	413.3	418.1	291.4	294.7
65											NO TRACKING DATA			
66	93.1	89.7	93.5	80.6	-0.03	-0.01	-0.01	-0.01	7.2	6.9	326.6	325.8	295.4	294.7
67	93.5	90.1	94.0	80.0	-0.10	-0.09	0.02	0.02	7.2	7.7	388.7	390.9	293.1	294.7
Avs.	93.6	90.3	94.5	80.8	-0.10	-0.09	0.01	0.02	7.1	7.3	376.2	378.3	293.3	294.7
Std Dv	0.9	1.0	1.9	1.4	0.10	0.11	0.03	0.04	0.3	0.6	63.2	67.0	2.9	0.0

TABLE NO. B.5-3.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
68	90.5	87.0	90.0	76.7	0.01	0.01	-0.02	-0.02	8.0	7.9	641.0	638.1	449.1	447.1
69	-	88.2	90.6	78.1	-0.06	-0.05	-	0.00	-	7.1	897.7	898.8	446.6	447.1
70	92.0	88.6	92.2	78.7	0.13	0.12	-0.04	-0.04	7.0	6.9	890.1	877.2	453.7	447.1
71	91.9	88.4	91.6	77.1	-0.19	-0.18	0.04	0.04	6.9	7.5	602.0	610.2	441.1	447.1
Avg.	91.5	88.1	91.1	77.7	-0.03	-0.03	-0.01	-0.00	7.3	7.3	757.7	756.1	447.6	447.1
Std Dv	1.2	0.8	1.2	1.2	0.16	0.15	0.06	0.04	0.9	0.5	193.7	187.4	6.4	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
72											NO TRACKING DATA			
73	88.7	85.5	87.3	73.6	0.14	0.12	-0.05	-0.05	7.4	7.7	1196.7	1179.9	608.1	599.5
74	-	85.9	88.6	75.2	0.22	0.20	-	-0.06	-	7.0	1060.6	1038.4	612.4	599.5
75	89.2	86.0	88.0	73.5	0.07	0.07	-0.03	-0.03	7.2	7.9	815.0	807.4	605.2	599.5
Avg.	88.9	85.8	88.0	74.1	0.14	0.13	-0.04	-0.05	7.3	7.6	1024.1	1008.6	608.6	599.5
Std Dv	0.4	0.4	0.9	1.4	0.11	0.09	0.01	0.02	0.2	0.6	209.1	201.2	5.1	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
76	87.6	84.2	85.9	73.3	0.34	0.31	-0.10	-0.09	7.2	7.0	781.0	757.4	775.4	751.9
77											NO TRACKING DATA			
Avg.	87.6	84.2	85.9	73.3	0.34	0.31	-0.10	-0.09	7.2	7.0	781.0	757.4	775.4	751.9
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BEST DOCUMENT AVAILABLE

TABLE NO. B.4-1.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/22/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
40	96.9	93.6	99.3	85.7	0.34	0.35	-0.13	-0.13	7.0	7.0	116.5	111.6	107.1	102.6
42	98.3	95.4	101.8	88.6	-0.67	-0.62	0.17	0.17	5.9	6.1	129.2	137.8	96.2	102.6
44	98.4	94.9	101.5	88.4	-0.13	-0.11	0.02	0.02	6.2	5.9	128.8	129.9	101.7	102.6
46	98.1	94.8	99.9	86.9	-0.04	-0.03	0.00	0.00	7.2	6.9	106.5	106.5	102.6	102.6
48	97.9	94.5	101.2	87.8	-0.14	-0.12	0.03	0.03	6.3	6.2	137.0	138.3	101.6	102.6
50											NO TRACKING DATA			
Avs.	97.9	94.6	100.8	87.5	-0.13	-0.11	0.02	0.02	6.5	6.4	123.6	124.8	101.8	102.6
Std Dv	0.7	0.8	1.3	1.4	0.42	0.40	0.12	0.12	0.6	0.6	13.9	17.2	4.5	0.0
TAKEOFF														
41	94.0	89.9	97.6	83.8	2.59	2.48	-0.86	-0.82	7.4	7.1	108.9	83.5	99.1	75.9
43	94.3	89.9	98.5	84.2	3.46	3.34	-1.05	-1.01	6.9	6.6	123.0	86.5	107.9	75.9
45											NO TRACKING DATA			
47	93.8	89.8	97.7	84.4	2.44	2.33	-0.80	-0.71	7.3	6.5	103.8	80.8	97.5	75.9
49	94.2	90.0	98.8	84.8	2.97	2.83	-0.86	-0.85	6.6	6.5	109.4	80.9	102.6	75.9
51	93.8	89.7	98.5	84.5	2.56	2.45	-0.77	-0.75	6.8	6.7	108.7	83.8	98.4	75.9
Avs.	94.0	89.9	98.2	84.3	2.80	2.69	-0.87	-0.83	7.0	6.7	110.8	83.1	101.1	75.9
Std Dv	0.2	0.1	0.6	0.4	0.48	0.47	0.13	0.13	0.4	0.3	8.3	2.7	4.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
18	90.0	86.8	93.2	79.6	-0.29	-0.22	0.02	0.02	6.3	6.5	167.9	169.2	150.1	151.2
19	88.6	85.5	92.5	78.9	0.05	0.09	-0.07	-0.07	6.1	6.3	194.5	189.5	155.1	151.2
20											NO TRACKING DATA			
21	88.7	85.7	91.7	78.4	-0.40	-0.31	0.04	0.05	6.4	6.9	185.9	188.9	148.8	151.2
22	89.0	86.1	92.4	79.3	-2.18	-1.69	0.28	0.28	6.1	6.1	475.8	528.8	136.0	151.2
23	88.8	85.7	92.8	79.0	0.75	0.74	-0.24	-0.26	6.3	6.8	195.4	178.7	165.3	151.2
Avs.	89.0	86.0	92.5	79.0	-0.41	-0.28	0.01	0.00	6.2	6.5	243.9	251.0	151.1	151.2
Std Dv	0.6	0.6	0.6	0.6	1.25	1.03	0.22	0.23	0.2	0.4	150.2	179.6	12.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
24											NO TRACKING DATA			
25	89.5	86.4	94.1	80.7	0.38	0.38	-0.14	-0.15	6.3	6.5	196.9	186.8	159.4	151.2
26	90.7	87.4	94.8	80.8	-0.73	-0.66	0.13	0.13	5.9	5.9	163.8	172.4	143.7	151.2
27	90.3	87.1	94.5	81.4	-0.33	-0.29	0.03	0.03	6.2	6.1	231.6	234.0	149.6	151.2
28	91.0	87.8	94.7	81.1	-0.79	-0.73	0.16	0.15	6.2	5.8	177.0	187.9	142.4	151.2
29	89.6	86.3	93.5	79.7	0.33	0.26	-0.10	-0.11	6.4	6.7	185.3	178.5	156.9	151.2
Avs.	90.2	87.0	94.3	80.7	-0.23	-0.21	0.02	0.01	6.2	6.2	190.9	191.9	150.4	151.2
Std Dv	0.7	0.8	0.6	0.8	0.65	0.59	0.15	0.16	0.2	0.5	29.7	28.2	8.8	0.0

TABLE NO. B.4-2.2

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/22/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
10	95.0	91.4	100.9	87.1	2.11	2.01	-0.52	-0.53	5.5	5.6	147.8	118.9	112.2	90.2
11	94.5	91.2	101.1	87.7	2.92	2.74	-0.66	-0.68	5.3	5.4	182.0	136.3	120.5	90.2
16	95.2	91.9	101.0	87.0	0.25	0.27	-0.09	-0.10	5.6	5.9	118.7	114.3	93.7	90.2
17												NO TRACKING DATA		
Avs.	94.9	91.5	101.0	87.3	1.76	1.67	-0.42	-0.44	5.4	5.6	149.5	123.2	108.8	90.2
Std Dv	0.5	0.5	0.1	0.5	1.94	1.79	0.42	0.43	0.2	0.3	44.8	16.4	19.3	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
8	89.9	87.3	92.1	79.8	0.07	0.12	-0.09	-0.09	7.0	6.9	268.3	260.3	218.6	212.1
9	89.1	86.2	92.3	79.8	1.01	0.97	-0.28	-0.27	6.0	5.8	315.8	283.1	236.7	212.1
14	89.1	86.4	91.4	79.0	0.36	0.39	-0.16	-0.16	6.8	6.7	297.4	281.3	224.2	212.1
15	88.3	85.6	91.4	79.1	0.55	0.56	-0.22	-0.21	7.0	6.7	283.1	263.3	228.1	212.1
Avs.	89.1	86.4	91.8	79.4	0.50	0.51	-0.19	-0.18	6.7	6.5	291.1	272.0	226.9	212.1
Std Dv	0.8	0.9	0.6	0.6	0.48	0.44	0.10	0.09	0.6	0.6	24.8	14.5	9.3	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
1	85.6	83.2	87.1	75.2	0.96	0.92	-0.34	-0.33	7.6	7.2	508.7	458.1	337.1	303.6
2	86.8	84.5	88.1	75.6	0.07	0.13	-0.10	-0.10	6.8	6.8	340.5	329.3	313.9	303.6
3	85.6	83.3	87.1	75.0	0.34	0.37	-0.18	-0.18	7.3	7.3	378.3	357.6	321.2	303.6
4	87.1	84.9	88.6	76.6	0.40	0.43	-0.19	-0.18	7.0	6.9	375.2	353.0	322.7	303.6
52	87.2	84.7	88.4	76.6	0.66	0.62	-0.20	-0.19	7.0	6.7	352.9	330.4	324.2	303.6
53	86.2	83.7	89.6	76.9	1.05	0.93	-0.22	-0.23	5.7	5.9	503.1	459.6	332.4	303.6
54	87.7	85.4	88.6	76.9	0.76	0.83	-0.23	-0.22	6.9	6.7	833.7	773.6	327.2	303.6
55	85.6	83.4	87.6	75.5	0.26	0.26	-0.11	-0.10	7.2	6.9	452.4	437.3	314.1	303.6
Avs.	86.5	84.1	88.1	76.0	0.59	0.56	-0.20	-0.19	6.9	6.8	468.1	437.3	324.1	303.6
Std Dv	0.9	0.9	0.9	0.9	0.40	0.33	0.08	0.08	0.6	0.5	174.7	158.4	8.8	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.4-3.2

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA - MAIN ROTOR RPM 107%

DOT/TSC
12/22/81

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	82.2	80.1	82.6	71.5	0.77	0.74	-0.29	-0.26	7.4	6.7	589.2	538.9	498.6	456.0
6											NO TRACKING DATA			
7	81.8	79.8	82.3	71.6	0.82	0.80	-0.29	-0.27	7.1	6.6	553.5	503.5	501.3	456.0
12											NO TRACKING DATA			
13	81.6	79.7	82.9	71.6	0.31	0.37	-0.18	-0.18	6.9	6.7	572.6	538.9	484.5	456.0
38	84.6	82.6	84.2	73.3	0.18	0.18	-0.14	-0.13	7.6	7.0	576.9	552.7	475.9	456.0
39	82.7	80.7	84.0	72.6	0.04	0.14	-0.12	-0.11	6.8	6.3	590.0	566.0	475.3	456.0
Avs.	82.6	80.6	83.2	72.1	0.42	0.45	-0.20	-0.19	7.2	6.7	576.4	540.0	487.1	456.0
Std Dv	1.4	1.4	1.0	0.9	0.41	0.36	0.09	0.08	0.4	0.3	17.2	26.9	14.2	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
34	82.2	80.3	81.3	70.1	0.02	-0.13	-0.09	-0.08	7.8	7.3	852.0	830.2	624.4	608.4
35	81.2	78.9	80.4	69.9	-0.01	-0.08	-0.08	-0.08	7.0	6.5	767.2	746.8	625.0	608.4
36	81.7	79.3	79.9	68.6	0.09	0.15	-0.13	-0.14	7.1	7.6	699.6	670.3	635.0	608.4
37	81.0	78.8	80.1	68.3	0.40	0.35	-0.20	-0.19	7.5	7.4	771.3	726.6	645.8	608.4
Avs.	81.5	79.3	80.4	69.2	0.12	0.07	-0.12	-0.12	7.4	7.2	772.5	743.5	632.5	608.4
Std Dv	0.7	0.8	0.8	1.1	0.23	0.27	0.07	0.07	0.5	0.6	76.3	81.1	12.4	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
30											NO TRACKING DATA			
31	79.2	76.9	77.7	65.8	0.36	-0.01	-0.13	-0.13	7.5	7.6	1185.0	1139.0	791.5	760.8
32	-	78.6	78.9	67.4	0.20	-0.29	-	-0.02	-	7.4	820.9	815.1	766.2	760.8
33	79.9	77.1	78.9	66.7	0.49	0.11	-0.13	-0.13	7.3	7.1	932.4	895.0	792.6	760.8
Avs.	79.5	77.5	78.5	66.6	0.35	-0.06	-0.13	-0.09	7.4	7.4	979.4	949.7	783.4	760.8
Std Dv	0.5	1.3	1.0	1.2	0.21	0.29	0.00	0.09	0.1	0.4	165.4	145.3	21.1	0.0

TABLE NO. B.5-2.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
56	99.9	96.5	104.3	91.7	0.84	0.81	-0.27	-0.24	7.1	6.3	224.2	205.2	98.6	90.2
57	99.2	95.1	104.2	90.9	0.72	0.69	-0.19	-0.18	5.8	5.6	115.6	107.2	97.2	90.2
58	99.4	95.8	104.4	91.3	1.13	1.09	-0.32	-0.32	6.2	6.1	112.0	99.4	101.7	90.2
59	99.1	95.0	103.6	89.6	0.99	0.97	-0.30	-0.31	6.6	6.8	144.0	129.8	100.1	90.2
Avg.	99.4	95.6	104.1	90.9	0.92	0.89	-0.27	-0.26	6.4	6.2	148.9	135.4	99.4	90.2
Std Dv	0.5	0.9	0.4	1.1	0.22	0.22	0.07	0.08	0.7	0.6	63.9	59.1	2.3	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
60	-	93.3	98.5	84.7	0.18	0.18	-	-0.08	-	7.5	732.4	715.6	217.1	212.1
61												NO TRACKING DATA		
62	95.3	92.0	96.7	84.0	0.45	0.43	-0.15	-0.14	7.4	7.2	231.9	221.3	222.3	212.1
63	94.6	91.1	95.5	81.9	0.16	0.16	-0.06	-0.06	7.4	7.4	314.4	308.4	216.2	212.1
Avg.	95.0	92.1	96.9	83.5	0.26	0.26	-0.10	-0.09	7.4	7.4	426.2	415.1	218.5	212.1
Std Dv	0.5	1.6	2.1	2.1	0.23	0.21	0.06	0.06	0.1	0.3	379.5	373.1	4.6	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
64	91.6	88.7	93.5	80.9	-0.27	-0.23	0.05	0.05	6.9	6.7	674.0	685.2	298.6	303.6
65												NO TRACKING DATA		
66	90.7	87.4	91.0	77.9	0.06	0.06	-0.03	-0.03	7.8	7.8	558.6	553.3	306.5	303.6
67	91.3	88.1	91.1	78.4	-0.13	-0.13	0.03	0.03	7.6	7.4	375.1	378.1	301.2	303.6
Avg.	91.2	88.1	91.9	79.1	-0.11	-0.10	0.02	0.02	7.5	7.3	535.9	538.9	302.1	303.6
Std Dv	0.6	0.9	2.0	2.2	0.23	0.21	0.06	0.06	0.7	0.8	213.2	217.8	5.7	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.5-3.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 2 CENTERLINE - 150 M. WEST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
68	87.6	84.8	87.4	74.7	0.05	0.05	-0.03	-0.03	7.9	7.8	1113.9	1104.3	460.0	456.0
69	88.7	85.8	87.1	74.2	-0.07	-0.07	0.01	0.01	7.8	7.8	567.9	569.3	454.9	456.0
70	89.0	85.7	88.4	75.3	0.15	0.14	-0.05	-0.05	7.5	7.5	1063.1	1046.5	463.2	456.0
71	89.2	85.9	87.9	74.7	-0.22	-0.19	0.05	0.05	7.4	7.9	705.0	715.4	449.4	456.0
Avg.	88.6	85.5	87.7	74.7	-0.02	-0.02	-0.00	-0.00	7.7	7.7	862.5	858.9	456.9	456.0
Std Dv	0.9	0.6	0.7	0.5	0.20	0.18	0.05	0.05	0.3	0.2	236.2	228.5	7.4	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
72											NO TRACKING DATA			
73	-	83.6	84.9	72.1	0.11	0.11	-	-0.04	-	7.4	927.8	915.3	616.7	608.4
74	86.4	83.7	84.2	72.1	0.16	0.15	-0.06	-0.06	8.4	7.8	641.3	630.3	618.9	608.4
75	86.6	83.7	84.7	71.5	0.02	0.03	-0.02	-0.02	7.8	8.1	914.1	908.5	612.1	608.4
Avg.	86.5	83.7	84.6	71.9	0.10	0.10	-0.04	-0.04	8.1	7.8	827.7	818.1	615.9	608.4
Std Dv	0.1	0.1	0.5	0.5	0.10	0.09	0.03	0.03	0.4	0.4	228.5	229.9	4.9	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
76											NO TRACKING DATA			
77											NO TRACKING DATA			
Avg.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.4-1.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/22/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		TRACKING DATA (METERS) (REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
40	95.5	92.2	95.8	82.7	0.43	0.43	-0.17	-0.16	7.4	6.9	186.1	176.4	141.2	133.9
42	95.9	93.0	97.3	85.1	-0.53	-0.49	0.14	0.13	6.8	6.4	159.9	167.8	127.6	133.9
44	97.6	94.6	98.4	85.7	0.36	0.36	-0.13	-0.12	6.9	6.6	183.5	175.7	139.8	133.9
46	97.4	94.4	97.7	85.0	0.34	0.34	-0.13	-0.13	7.4	7.1	158.2	151.9	139.5	133.9
48	97.3	94.4	99.3	86.6	0.39	0.39	-0.13	-0.13	6.7	6.6	187.9	179.6	140.1	133.9
50											NO TRACKING DATA			
Avg.	96.7	93.7	97.7	85.0	0.20	0.21	-0.08	-0.08	7.0	6.7	175.1	170.3	137.7	133.9
Std Dv	1.1	1.2	1.5	1.7	0.47	0.45	0.15	0.14	0.4	0.3	17.0	12.9	6.5	0.0
TAKEOFF														
41	89.8	86.3	91.9	79.1	1.35	1.32	-0.49	-0.44	7.9	7.0	159.7	138.4	144.2	124.9
43	90.3	86.4	92.8	79.2	2.67	2.57	-0.85	-0.81	7.3	7.0	174.7	133.9	163.0	124.9
45											NO TRACKING DATA			
47	89.7	86.3	92.0	77.7	3.06	2.88	-1.00	-1.08	7.4	8.0	233.6	171.3	170.3	124.9
49	90.1	86.6	92.1	78.5	2.99	2.81	-0.99	-1.00	7.6	7.6	251.5	186.3	168.6	124.9
51	90.6	87.3	92.9	79.3	2.91	2.75	-0.94	-0.97	7.5	7.6	238.7	178.3	167.2	124.9
Avg.	90.1	86.6	92.3	78.8	2.60	2.47	-0.85	-0.86	7.6	7.5	211.6	161.6	162.7	124.9
Std Dv	0.4	0.5	0.5	0.8	0.82	0.75	0.24	0.29	0.3	0.5	47.8	27.6	12.3	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 109 KTS														
18	90.3	87.2	93.3	80.5	-0.36	-0.26	0.03	0.03	6.0	5.9	203.2	205.5	149.5	151.2
19	88.3	85.2	92.2	78.0	0.32	0.34	-0.14	-0.16	6.4	7.1	221.8	210.9	159.1	151.2
20											NO TRACKING DATA			
21	88.7	85.7	91.8	78.6	-0.20	-0.18	0.00	0.00	6.8	6.9	242.0	242.4	150.9	151.2
22	89.6	86.5	93.0	79.9	-1.25	-1.07	0.25	0.24	6.2	6.1	179.1	196.5	137.8	151.2
23	88.6	85.6	91.5	78.0	0.54	0.54	-0.20	-0.21	6.7	6.9	197.6	184.4	162.0	151.2
Avg.	89.1	86.1	92.3	79.0	-0.19	-0.13	-0.01	-0.02	6.4	6.6	208.8	207.9	151.9	151.2
Std Dv	0.9	1.0	0.9	1.3	0.81	0.72	0.20	0.21	0.4	0.6	27.8	25.1	10.9	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 124 KTS														
24											NO TRACKING DATA			
25	88.4	85.6	93.1	79.5	0.24	0.26	-0.11	-0.12	6.1	6.7	223.7	214.3	157.8	151.2
26	89.6	86.7	92.6	80.0	-0.38	-0.32	0.05	0.05	6.5	6.1	185.3	188.7	148.5	151.2
27	87.8	85.0	91.5	78.0	0.05	0.05	-0.06	-0.06	6.5	6.9	204.1	200.1	154.2	151.2
28	89.8	86.9	93.4	80.6	-0.42	-0.38	0.06	0.06	6.1	5.9	204.1	208.9	147.7	151.2
29	86.4	85.4	91.5	78.7	0.81	0.71	-0.24	-0.23	6.7	6.5	192.8	177.6	164.1	151.2
Avg.	88.8	85.9	92.4	79.4	0.06	0.06	-0.06	-0.06	6.4	6.4	202.0	197.9	154.5	151.2
Std Dv	1.0	1.0	1.0	1.2	0.58	0.52	0.14	0.14	0.3	0.5	16.7	17.2	7.9	0.0

TABLE NO. B.4-2.3

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/22/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		TRACKING DATA (METERS) (REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
10	94.4	91.0	99.7	86.9	2.36	2.21	-0.60	-0.56	5.9	5.4	179.7	141.7	114.4	90.2
11	94.1	90.9	100.1	86.6	2.67	2.50	-0.70	-0.70	6.1	6.1	191.0	146.7	117.5	90.2
16	94.8	91.3	99.5	85.8	0.38	0.39	-0.13	-0.14	5.8	6.1	140.7	133.6	95.0	90.2
17											NO TRACKING DATA			
Avg.	94.4	91.1	99.8	86.4	1.80	1.70	-0.48	-0.47	5.9	5.9	170.5	140.7	108.9	90.2
Std Dv	0.5	0.3	0.4	0.8	1.76	1.62	0.43	0.41	0.2	0.6	37.3	9.3	17.2	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
8	89.2	86.8	92.1	80.2	0.30	0.33	-0.14	-0.14	6.4	6.2	294.4	279.9	223.2	212.1
9	87.4	84.9	90.6	77.9	1.30	1.22	-0.39	-0.40	6.8	7.0	291.0	254.7	242.4	212.1
14	88.8	86.2	91.6	79.5	0.42	0.44	-0.17	-0.16	6.5	6.2	293.4	276.0	225.5	212.1
15	87.6	85.1	90.4	77.8	0.73	0.71	-0.26	-0.26	7.0	6.9	290.8	266.7	231.3	212.1
Avg.	88.3	85.7	91.2	78.8	0.69	0.67	-0.24	-0.24	6.7	6.6	292.4	269.3	230.6	212.1
Std Dv	1.1	1.1	1.0	1.5	0.55	0.49	0.14	0.15	0.4	0.5	2.2	13.7	10.5	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
1	85.7	83.3	87.8	75.6	1.04	0.99	-0.33	-0.33	6.9	6.8	597.0	534.4	339.1	303.6
2	86.3	84.2	86.1	75.3	0.19	0.21	-0.13	-0.12	7.6	6.9	369.6	355.3	315.8	303.6
3	85.5	83.4	87.0	75.0	0.58	0.59	-0.24	-0.24	7.4	7.2	416.0	385.6	327.4	303.6
4	87.3	84.9	88.4	77.0	0.47	0.50	-0.21	-0.20	7.2	6.7	418.5	391.1	324.9	303.6
52	86.9	84.7	88.0	76.4	0.51	0.48	-0.17	-0.16	7.2	6.8	352.2	333.7	320.4	303.6
53	84.7	82.2	86.7	74.0	1.06	0.95	-0.30	-0.30	7.0	7.3	365.2	331.6	334.4	303.6
54	88.5	85.9	90.7	79.1	1.44	1.21	-0.27	-0.25	6.4	5.8	946.3	856.8	335.3	303.6
55	86.2	83.9	87.5	75.4	0.35	0.34	-0.13	-0.13	7.3	7.6	362.1	347.7	316.2	303.6
Avg.	86.4	84.1	87.8	76.0	0.70	0.66	-0.22	-0.22	7.1	6.9	478.4	442.0	326.7	303.6
Std Dv	1.3	1.2	1.5	1.7	0.46	0.38	0.08	0.08	0.4	0.6	221.6	194.4	9.7	0.0

DOT/TSC
12/22/81

TABLE NO. B.4-3.3

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
5	81.6	79.4	81.2	69.1	0.66	0.63	-0.28	-0.28	7.9	7.8	923.9	851.3	494.9	456.0
6											NO TRACKING DATA			
7	82.5	80.6	83.1	71.5	0.67	0.67	-0.27	-0.26	7.3	7.2	629.3	578.4	496.1	456.0
12											NO TRACKING DATA			
13	80.7	79.0	81.7	70.1	0.30	0.36	-0.18	-0.18	7.0	7.0	575.4	542.2	483.9	456.0
38	84.0	81.9	83.9	73.2	0.04	0.07	-0.10	-0.10	6.9	6.7	583.7	563.7	472.2	456.0
39	81.4	79.5	80.9	69.4	0.27	0.32	-0.19	-0.19	7.8	7.6	637.4	602.5	482.4	456.0
Avg.	82.0	80.1	82.2	70.7	0.39	0.41	-0.20	-0.20	7.4	7.3	670.0	627.6	485.9	456.0
Std Dv	1.5	1.4	1.5	1.9	0.31	0.28	0.09	0.08	0.5	0.5	166.9	146.6	11.4	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
34	81.6	79.7	80.7	69.6	-0.11	-0.21	-0.06	-0.06	7.7	7.5	770.9	758.0	618.8	608.4
35	81.5	79.5	80.5	68.4	1.80	1.52	-0.52	-0.52	8.0	8.0	1606.8	1384.5	706.1	608.4
36	81.1	79.0	80.2	69.4	0.17	0.18	-0.15	-0.14	7.3	6.8	767.9	732.8	637.5	608.4
37	79.9	77.9	78.7	67.0	0.38	0.31	-0.18	-0.18	7.7	7.6	674.4	638.4	642.6	608.4
Avg.	81.0	79.0	80.0	68.6	0.56	0.45	-0.23	-0.22	7.7	7.5	955.0	878.4	651.2	608.4
Std Dv	1.0	1.0	1.1	1.4	1.04	0.91	0.25	0.25	0.3	0.6	271.7	216.0	46.5	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 140 KTS														
30											NO TRACKING DATA			
31	-	74.8	75.9	64.4	0.32	0.00	-	-0.10	-	7.0	871.5	843.1	786.5	760.8
32	-	77.7	77.4	66.6	0.10	-0.33	-	-0.03	-	7.4	950.1	939.9	769.0	760.8
33	-	75.5	76.3	64.3	0.49	0.04	-	-0.14	-	7.5	1234.2	1184.0	793.1	760.8
Avg.	-	76.0	76.5	65.1	0.30	-0.10	-	-0.09	-	7.3	1018.6	989.0	782.8	760.8
Std Dv	-	2.1	1.1	1.8	0.28	0.29	-	0.08	-	0.4	147.1	154.0	17.6	0.0

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TABLE NO. B.5-2.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/23/81

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NFL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
56	100.7	96.9	104.9	91.4	0.90	0.85	-0.29	-0.28	7.2	6.9	221.1	201.5	99.0	90.2
57	100.1	95.8	104.6	90.2	0.73	0.70	-0.21	-0.21	6.3	6.2	109.8	101.7	97.4	90.2
58	100.9	97.4	104.8	91.1	1.49	1.41	-0.46	-0.47	7.1	7.3	282.1	242.9	104.8	90.2
59	100.0	95.9	103.8	89.9	0.62	0.60	-0.19	-0.20	6.7	7.1	169.5	158.7	96.4	90.2
Avg.	100.4	96.5	104.5	90.7	0.93	0.89	-0.29	-0.29	6.8	6.9	195.6	176.2	99.4	90.2
Std Dv	0.5	1.0	0.6	0.8	0.47	0.44	0.15	0.15	0.5	0.5	89.9	74.0	4.6	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
60	95.3	91.8	97.3	84.1	0.67	0.63	-0.21	-0.20	7.3	7.1	613.4	574.7	226.4	212.1
61											NO TRACKING DATA			
62	94.8	91.3	97.5	84.2	0.72	0.68	-0.21	-0.21	6.8	6.6	235.4	219.0	228.1	212.1
63	95.2	91.8	96.3	82.6	-0.28	-0.25	0.07	0.07	7.8	8.1	647.3	660.0	208.1	212.1
Avg.	95.1	91.6	97.0	83.6	0.37	0.35	-0.12	-0.11	7.3	7.3	498.7	484.6	220.8	212.1
Std Dv	0.4	0.4	0.9	1.3	0.80	0.74	0.23	0.22	0.7	1.0	323.4	330.8	15.7	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
64	92.5	89.3	94.4	81.5	-0.12	-0.10	0.01	0.01	6.5	6.1	616.4	618.9	302.4	303.6
65											NO TRACKING DATA			
66	91.7	88.5	92.4	79.5	-0.05	-0.04	0.00	0.00	6.8	6.6	310.5	310.9	303.3	303.6
67	91.3	88.0	92.1	78.6	-0.06	-0.05	0.01	0.01	7.3	7.5	544.8	545.8	303.0	303.6
Avg.	91.8	88.6	93.0	79.9	-0.08	-0.06	0.01	0.01	6.9	6.7	490.6	491.8	302.9	303.6
Std Dv	0.9	0.9	1.7	2.1	0.05	0.05	0.01	0.01	0.6	1.0	226.2	227.6	0.7	0.0

DOT/TSC
12/23/81

TABLE NO. B.5-3.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

SITE: 3 CENTERLINE - 150 M. EAST JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
68	88.5	85.6	87.9	75.4	-0.03	-0.02	0.00	0.00	7.8	7.5	477.6	477.0	456.6	456.0
69	89.7	86.5	88.9	76.3	-0.06	-0.05	0.00	0.00	6.9	6.6	938.9	939.3	455.8	456.0
70	88.9	85.7	88.1	75.2	0.14	0.13	-0.05	-0.05	7.3	7.0	967.8	952.8	463.2	456.0
71	90.1	86.5	90.7	78.1	-0.17	-0.15	0.02	0.02	6.2	5.8	938.1	946.1	452.2	456.0
Avg.	89.3	86.1	88.9	76.3	-0.03	-0.02	-0.01	-0.01	7.1	6.7	830.6	828.8	456.9	456.0
Std Dv	0.9	0.6	1.5	1.6	0.16	0.14	0.04	0.04	0.8	0.9	271.9	273.6	5.6	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
72											NO TRACKING DATA			
73	87.3	84.4	84.5	72.4	0.07	0.06	-0.03	-0.03	7.6	7.2	729.6	722.4	614.4	608.4
74	87.9	85.0	87.7	74.6	0.22	0.20	-0.06	-0.06	6.5	6.6	1179.5	1154.6	621.5	608.4
75	88.0	85.0	89.2	76.2	1.17	1.06	-0.25	-0.25	6.5	6.4	1461.1	1337.6	664.6	608.4
Avg.	87.7	84.8	87.1	74.4	0.49	0.44	-0.11	-0.11	6.9	6.7	1123.4	1071.5	633.5	608.4
Std Dv	0.5	0.5	3.4	2.7	0.84	0.77	0.17	0.17	0.9	0.5	393.8	349.2	38.4	0.0
2500 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
76	86.2	83.1	84.4	70.9	0.46	0.42	-0.12	-0.12	7.4	7.6	1484.0	1428.8	790.2	760.8
77											NO TRACKING DATA			
Avg.	86.2	83.1	84.4	70.9	0.46	0.42	-0.12	-0.12	7.4	7.6	1484.0	1428.8	790.2	760.8
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BEST DOCUMENT AVAILABLE

TABLE NO. B.4-1.4

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA - MAIN ROTOR RPM 107%

DOT/TSC
12/22/81

SITE: 4 SIDELINE - 164 M. NORTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	SEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
40	95.1	92.4	95.9	83.3	0.35	0.35	-0.15	-0.14	7.4	6.9	244.5	233.6	199.9	191.0
42	94.8	92.2	93.9	81.4	-0.17	-0.12	0.01	0.01	7.8	7.7	331.1	332.1	190.4	191.0
44	95.5	92.4	96.4	83.7	-0.34	-0.29	0.07	0.07	6.7	6.5	229.3	235.0	186.3	191.0
46	96.3	93.6	98.1	84.8	0.26	0.27	-0.09	-0.10	6.2	6.5	233.1	225.3	197.5	191.0
48	94.2	91.5	95.3	82.3	-0.16	-0.13	0.02	0.03	6.8	6.9	226.1	228.0	189.4	191.0
50											NO TRACKING DATA			
Avs.	95.2	92.4	95.9	83.1	-0.01	0.02	-0.03	-0.03	7.0	6.9	252.8	250.8	192.7	191.0
Std Dv	0.9	0.9	1.8	1.5	0.35	0.32	0.10	0.10	0.7	0.6	51.2	52.7	6.6	0.0
TAKEOFF														
41	93.4	90.0	95.4	81.2	1.14	1.09	-0.39	-0.41	7.4	7.9	238.0	211.0	203.6	180.5
43	93.5	90.0	95.6	81.2	1.31	1.26	-0.38	-0.39	6.4	6.6	225.5	196.9	206.7	180.5
45											NO TRACKING DATA			
47	92.7	89.4	94.4	81.1	0.71	0.69	-0.25	-0.25	7.4	7.5	211.5	195.7	195.0	180.5
49	92.7	89.1	94.7	81.7	0.96	0.92	-0.32	-0.30	7.4	7.0	202.5	183.1	199.5	180.5
51	92.9	89.7	94.7	81.5	0.71	0.68	-0.23	-0.24	7.1	7.2	217.5	201.7	194.6	180.5
Avs.	93.0	89.6	95.0	81.4	0.97	0.93	-0.31	-0.32	7.1	7.2	219.0	197.7	199.9	180.5
Std Dv	0.4	0.4	0.6	0.3	0.31	0.29	0.08	0.09	0.5	0.6	15.7	11.7	6.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS														
18	90.0	87.2	90.7	77.8	-0.35	-0.33	0.05	0.05	7.5	7.5	276.3	280.6	209.7	212.9
19	90.0	87.6	93.0	80.1	0.64	0.64	-0.22	-0.24	6.5	6.9	243.3	224.9	230.4	212.9
20											NO TRACKING DATA			
21	89.8	87.4	92.5	79.9	0.47	0.46	-0.18	-0.19	6.9	7.0	250.4	235.6	226.3	212.9
22	89.2	86.4	90.6	77.7	-0.92	-0.88	0.22	0.21	7.4	7.3	268.8	287.7	199.0	212.9
23	89.9	87.4	92.4	80.0	0.93	0.90	-0.33	-0.32	7.3	7.1	275.2	247.7	236.5	212.9
Avs.	89.8	87.2	91.8	79.1	0.15	0.16	-0.09	-0.10	7.1	7.1	262.8	255.3	220.4	212.9
Std Dv	0.4	0.5	1.3	1.4	0.88	0.85	0.26	0.25	0.5	0.3	17.4	31.9	18.0	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS														
25	90.7	88.5	94.2	81.6	0.92	0.86	-0.28	-0.30	6.4	6.7	252.7	228.4	235.5	212.9
26	89.7	87.2	91.4	78.4	-0.51	-0.52	0.10	0.11	7.1	7.5	261.8	270.8	205.9	212.9
27	90.4	88.3	93.7	81.4	0.49	0.45	-0.18	-0.18	6.9	7.1	249.6	235.2	226.0	212.9
28	89.8	87.2	91.7	78.7	-0.48	-0.53	0.11	0.11	7.1	7.4	258.1	267.5	205.5	212.9
29	91.4	88.7	95.8	82.2	1.50	1.27	-0.35	-0.39	5.8	6.6	268.3	233.9	244.2	212.9
Avs.	90.4	88.0	93.4	80.5	0.38	0.31	-0.12	-0.13	6.7	7.1	258.1	247.2	223.4	212.9
Std Dv	0.8	0.8	2.1	2.0	1.01	0.94	0.25	0.27	0.6	0.5	8.5	23.4	20.1	0.0

TABLE NO. B.4-2.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/22/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 4 SIDELINE - 164 M. NORTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
10	93.8	90.0	97.0	83.6	0.62	0.61	-0.23	-0.22	7.1	6.9	195.4	181.3	188.6	175.0
11	94.1	91.8	97.9	85.4	1.05	1.00	-0.33	-0.34	6.7	6.9	271.4	242.3	196.0	175.0
16	94.1	90.4	98.2	84.5	0.89	0.85	-0.29	-0.29	6.7	6.6	241.0	218.3	193.2	175.0
17											NO TRACKING DATA			
Avg.	94.0	90.8	97.7	84.5	0.85	0.82	-0.28	-0.28	6.8	6.8	235.9	213.9	192.6	175.0
Std Dv	0.3	1.3	0.9	1.3	0.31	0.28	0.07	0.09	0.3	0.2	54.1	43.5	5.3	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
8	91.1	88.5	92.4	80.1	0.09	0.15	-0.10	-0.10	7.5	7.5	290.0	280.9	268.2	259.8
9	91.9	89.0	95.4	81.9	1.54	1.41	-0.43	-0.46	6.6	7.1	360.8	310.4	302.0	259.8
14	89.7	87.1	91.6	79.2	-0.07	-0.07	-0.04	-0.04	7.0	7.1	317.8	314.1	262.9	259.8
15	90.4	87.6	94.1	80.7	0.71	0.70	-0.23	-0.25	6.3	6.8	351.6	322.7	283.0	259.8
Avg.	90.8	88.1	93.4	80.5	0.57	0.55	-0.20	-0.21	6.9	7.1	330.1	307.0	279.0	259.8
Std Dv	1.2	1.0	2.1	1.4	0.89	0.81	0.21	0.23	0.6	0.4	39.8	22.3	21.4	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
1	89.4	86.5	91.2	78.8	1.22	1.12	-0.39	-0.37	7.3	6.9	494.6	437.9	382.5	338.6
2	88.5	85.8	88.1	75.8	-0.16	-0.16	-0.02	-0.02	7.5	7.6	420.1	417.8	340.5	338.6
3	89.5	86.9	90.9	78.0	0.58	0.58	-0.25	-0.25	7.5	7.7	460.3	427.0	365.0	338.6
4	88.7	86.2	88.6	76.3	0.24	0.22	-0.14	-0.14	7.9	7.8	479.1	459.3	353.2	338.6
52	86.9	84.5	87.2	75.1	-0.22	-0.15	0.01	0.01	7.3	7.1	349.1	350.4	337.4	338.6
53	88.7	86.0	90.2	77.9	1.43	1.27	-0.39	-0.37	7.2	7.0	419.2	370.7	382.9	338.6
54	87.8	85.2	88.9	76.6	0.48	0.45	-0.15	-0.14	7.0	6.7	784.8	747.2	355.6	338.6
55	88.7	85.8	93.1	79.6	0.60	0.55	-0.14	-0.15	5.7	6.1	440.6	415.7	359.0	338.6
Avg.	88.5	85.9	89.8	77.3	0.52	0.48	-0.18	-0.18	7.2	7.1	481.0	453.2	359.5	338.6
Std Dv	0.9	0.8	2.1	1.7	0.63	0.57	0.16	0.15	0.7	0.6	141.1	133.8	18.3	0.0

TABLE NO. B.4-3.4

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/22/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 4 SIDELINE - 164 M. NORTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
5	85.1	82.6	85.9	73.2	0.90	0.81	-0.30	-0.30	7.2	7.3	589.9	536.3	527.9	480.0
6											NO TRACKING DATA			
7	85.9	83.0	86.8	72.8	0.82	0.73	-0.28	-0.30	7.2	7.8	569.8	521.1	524.8	480.0
12											NO TRACKING DATA			
38	84.4	82.5	82.9	71.6	-0.31	-0.17	-0.04	-0.04	7.8	7.7	502.9	497.1	485.6	480.0
39	85.1	82.6	86.1	73.7	0.36	0.40	-0.18	-0.18	6.9	6.7	615.1	578.7	510.2	480.0
Avg.	85.1	82.7	85.4	72.8	0.44	0.44	-0.20	-0.20	7.3	7.4	569.4	533.3	512.1	480.0
Std Dv	0.7	0.3	2.2	1.1	0.68	0.55	0.15	0.15	0.4	0.6	58.9	42.0	23.6	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
34	83.5	81.4	81.5	69.7	-0.09	-0.14	-0.07	-0.07	7.7	7.6	721.1	706.8	639.3	626.6
35	83.3	80.9	82.2	70.1	-0.03	-0.10	-0.08	-0.08	7.8	7.7	1009.9	985.5	642.1	626.6
36	-	80.9	81.0	69.2	0.06	0.12	-	-0.14	-	7.7	685.0	657.2	653.1	626.6
37	83.4	81.1	82.4	70.0	0.38	0.29	-0.18	-0.18	7.8	7.8	736.1	697.2	661.6	626.6
Avg.	83.4	81.1	81.8	69.7	0.08	0.04	-0.11	-0.12	7.8	7.7	788.0	761.7	649.0	626.6
Std Dv	0.1	0.3	0.8	0.5	0.26	0.25	0.09	0.06	0.1	0.1	94.3	95.1	12.6	0.0
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
30											NO TRACKING DATA			
31	80.3	77.6	81.2	68.6	0.72	0.31	-0.17	-0.17	6.6	6.5	1135.7	1070.1	823.0	775.4
32	82.5	79.9	80.0	67.9	0.37	-0.18	-0.05	-0.05	7.8	7.7	849.9	838.4	786.1	775.4
33	81.8	79.0	80.7	69.3	0.68	0.28	-0.20	-0.19	7.6	7.2	1486.0	1397.9	824.3	775.4
Avg.	81.5	78.8	80.6	68.6	0.59	0.14	-0.14	-0.14	7.3	7.1	1157.2	1102.1	811.1	775.4
Std Dv	1.6	1.7	0.9	1.0	0.27	0.39	0.11	0.11	0.9	0.8	307.3	263.7	30.7	0.0

TABLE NO. B.5-2.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 4 SIDELINE - 164 M. NORTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
56	97.5	93.5	101.0	87.8	-0.14	-0.12	0.03	0.02	6.6	6.1	193.1	194.3	173.5	175.0
57	98.6	95.3	102.6	89.1	-0.43	-0.39	0.09	0.10	5.8	6.4	182.9	189.8	168.6	175.0
58	96.7	92.8	99.6	86.5	-0.77	-0.74	0.20	0.20	6.6	6.6	243.1	265.8	163.4	175.0
59	99.7	96.4	102.0	89.7	0.43	0.42	-0.15	-0.13	7.4	6.6	186.5	178.1	183.3	175.0
Avs.	98.1	94.5	101.3	88.3	-0.23	-0.21	0.04	0.05	6.6	6.4	202.6	207.1	172.2	175.0
Std Dv	1.6	2.0	1.6	1.7	0.62	0.60	0.18	0.17	0.8	0.3	37.5	48.7	10.4	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
60	94.8	92.0	95.6	82.5	-1.56	-1.47	0.38	0.38	7.5	7.6	870.7	977.5	231.4	259.8
61											NO TRACKING DATA			
62	94.9	91.6	95.9	83.5	-0.79	-0.74	0.22	0.20	7.0	6.4	246.2	264.4	241.9	259.8
63	95.3	92.6	95.6	83.6	0.07	0.07	-0.04	-0.04	8.0	7.7	323.0	319.3	262.8	259.8
Avs.	95.0	92.0	95.7	83.2	-0.76	-0.71	0.19	0.18	7.5	7.2	480.0	520.4	245.4	259.8
Std Dv	0.4	0.7	0.2	0.9	1.15	1.09	0.30	0.30	0.7	1.1	481.6	325.5	22.6	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
64	95.7	93.2	97.4	84.5	-0.46	-0.41	0.11	0.11	7.1	7.3	520.3	538.9	326.9	338.6
65											NO TRACKING DATA			
66	95.3	92.4	95.3	83.8	-0.44	-0.41	0.12	0.11	7.3	6.9	332.1	344.6	326.4	338.6
67	-	90.4	92.8	80.2	-0.07	-0.04	-	0.00	-	7.6	340.8	341.0	338.4	338.6
Avs.	95.5	92.0	95.2	82.8	-0.32	-0.29	0.12	0.07	7.2	7.3	397.7	408.1	330.6	338.6
Std Dv	0.3	2.0	3.2	3.2	0.31	0.30	0.01	0.09	0.2	0.5	150.2	160.2	9.6	0.0

TABLE NO. B.5-3.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/23/81

SITE: 4 SIDELINE - 164 M. NORTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
68	92.1	89.7	92.7	81.7	-0.41	-0.37	0.10	0.09	7.3	6.5	482.1	497.0	465.6	480.0
69	91.9	88.7	91.2	77.6	0.46	0.39	-0.12	-0.12	7.2	7.4	1211.2	1167.0	498.2	480.0
70	92.5	90.0	92.1	81.3	-0.08	-0.07	0.01	0.01	7.9	6.8	478.5	480.1	478.5	480.0
71	91.8	88.6	89.7	77.4	-0.05	-0.04	0.00	0.00	7.6	7.1	697.1	696.6	480.4	480.0
Avg.	92.1	89.3	91.4	79.5	-0.02	-0.02	-0.00	-0.01	7.5	6.9	717.2	710.2	480.7	480.0
Std Dv	0.4	0.9	1.6	2.9	0.44	0.38	0.11	0.11	0.4	0.5	237.3	222.0	16.4	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
72											NO TRACKING DATA			
73	88.7	85.9	87.0	74.4	0.11	0.10	-0.04	-0.04	7.2	7.2	794.1	783.8	634.8	626.6
74	90.4	88.2	90.0	78.0	-0.06	-0.05	0.00	0.00	7.3	7.3	1068.0	1068.1	626.5	626.6
75	88.4	85.7	86.4	75.1	0.10	0.10	-0.04	-0.04	7.6	6.9	666.7	658.3	634.6	626.6
Avg.	89.2	86.6	87.8	75.8	0.05	0.05	-0.03	-0.03	7.4	7.1	842.9	836.7	632.0	626.6
Std Dv	1.5	2.0	2.8	2.7	0.13	0.12	0.03	0.03	0.3	0.3	182.9	186.1	6.7	0.0
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
76	88.1	85.8	86.3	75.8	0.08	0.08	-0.04	-0.03	7.4	6.5	784.0	775.4	784.1	775.4
77											NO TRACKING DATA			
Avg.	88.1	85.8	86.3	75.8	0.08	0.08	-0.04	-0.03	7.4	6.5	784.0	775.4	784.1	775.4
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.4-1.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
40	92.0	88.7	90.8	76.5	-0.18	-0.14	0.01	0.01	7.6	7.8	269.8	270.7	190.3	191.0
42	92.2	89.4	91.6	79.1	-0.55	-0.49	0.12	0.12	6.9	6.7	251.7	261.9	183.5	191.0
44	93.8	90.3	92.6	78.4	0.33	0.33	-0.14	-0.14	7.7	7.9	198.9	191.0	198.8	191.0
46	93.4	90.1	91.1	77.2	-0.15	-0.13	0.03	0.03	8.1	8.4	189.7	191.3	189.4	191.0
48	93.7	90.6	92.4	80.5	0.76	0.72	-0.27	-0.24	7.8	7.0	420.2	388.4	206.6	191.0
50											NO TRACKING DATA			
Avg.	93.0	89.8	91.7	78.3	0.04	0.06	-0.05	-0.04	7.6	7.6	266.0	260.6	193.7	191.0
Std Dv	1.0	0.9	0.9	1.8	0.59	0.54	0.18	0.17	0.5	0.8	107.0	93.2	10.4	0.0
TAKEOFF														
41	89.2	86.9	91.3	78.8	0.81	0.79	-0.28	-0.29	7.2	7.4	199.2	182.3	197.3	180.5
43	89.3	87.1	91.4	78.8	1.11	1.07	-0.35	-0.36	6.8	7.0	206.6	183.6	203.0	180.5
45											NO TRACKING DATA			
47	90.2	88.1	92.6	80.9	1.27	1.23	-0.40	-0.39	6.9	6.8	213.0	186.6	206.0	180.5
49	90.1	88.1	92.7	80.9	1.29	1.24	-0.41	-0.42	7.1	7.2	208.7	182.6	206.3	180.5
51	89.8	87.7	91.5	79.8	1.17	1.12	-0.40	-0.38	7.5	7.2	207.8	184.2	203.7	180.5
Avg.	89.7	87.5	91.9	79.8	1.13	1.09	-0.37	-0.37	7.1	7.1	207.1	183.6	203.3	180.5
Std Dv	0.5	0.6	0.8	1.2	0.22	0.21	0.06	0.06	0.3	0.2	5.8	2.0	4.2	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS														
18	89.6	87.5	90.3	77.9	-0.17	-0.08	-0.02	-0.02	7.4	7.2	219.4	218.0	214.4	212.9
19	86.2	83.7	89.1	75.7	-0.72	-0.70	0.15	0.15	6.8	7.1	270.4	284.2	202.6	212.9
20											NO TRACKING DATA			
21	88.7	85.8	90.8	77.5	-1.07	-1.01	0.26	0.27	7.1	7.3	264.7	288.1	195.6	212.9
22	89.1	87.1	90.8	78.6	-0.60	-0.47	0.10	0.09	7.2	6.9	211.7	218.3	206.5	212.9
23	85.7	83.6	87.5	74.9	-0.51	-0.41	0.07	0.07	7.1	7.5	265.6	271.3	208.5	212.9
Avg.	87.9	85.5	89.7	76.9	-0.61	-0.53	0.11	0.11	7.1	7.2	246.4	256.0	205.5	212.9
Std Dv	2.1	2.1	1.6	1.8	0.38	0.40	0.12	0.12	0.2	0.3	32.7	40.5	8.0	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS														
24											NO TRACKING DATA			
25	86.7	84.5	89.4	77.5	-0.32	-0.23	0.02	0.02	7.0	6.7	215.8	217.6	211.2	212.9
26	90.7	88.6	91.7	79.6	-0.25	-0.19	0.01	0.01	7.4	7.4	236.3	237.0	212.3	212.9
27	86.1	84.0	89.0	76.7	-0.99	-0.85	0.18	0.19	6.6	6.8	245.9	262.3	199.6	212.9
28	90.4	88.4	91.7	79.2	-0.27	-0.23	0.03	0.03	7.0	7.4	226.2	228.1	211.1	212.9
29	85.4	83.3	88.2	75.3	-1.42	-1.27	0.30	0.33	6.6	7.2	245.4	272.3	191.7	212.9
Avg.	87.9	85.8	90.0	77.7	-0.65	-0.55	0.11	0.12	6.9	7.1	233.9	243.5	205.2	212.9
Std Dv	2.9	2.9	1.9	2.1	0.61	0.56	0.15	0.16	0.4	0.4	14.9	26.7	10.5	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.4-2.5

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA - MAIN ROTOR RPM 107%

DOT/TSC
12/23/81

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
10	93.0	91.1	95.8	83.5	0.57	0.54	-0.21	-0.21	7.1	7.0	253.5	236.7	187.4	175.0
11	90.0	86.9	94.6	81.1	0.42	0.43	-0.16	-0.17	6.2	6.6	227.3	214.5	185.4	175.0
16	92.4	90.9	94.1	82.4	-1.28	-1.08	0.29	0.29	7.1	7.3	207.2	227.3	159.6	175.0
17											NO TRACKING DATA			
Avg.	91.8	89.7	94.8	82.3	-0.10	-0.04	-0.03	-0.03	6.8	7.0	229.3	226.2	177.5	175.0
Std Dv	2.2	3.3	1.2	1.7	1.45	1.28	0.39	0.39	0.7	0.5	32.8	15.7	22.0	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
8	90.6	88.4	91.2	78.4	-0.10	-0.02	-0.05	-0.05	7.5	7.7	275.1	270.8	263.9	259.8
9	86.2	84.1	87.6	76.0	-0.20	-0.14	-0.02	-0.02	7.7	7.4	325.2	323.0	261.6	259.8
14	90.7	88.2	91.4	78.7	0.46	0.47	-0.21	-0.21	7.6	7.7	298.7	280.2	276.9	259.8
15	86.5	84.0	89.0	76.7	-0.09	-0.01	-0.07	-0.07	6.9	7.0	334.6	327.4	265.5	259.8
Avg.	88.5	86.2	89.8	77.4	0.02	0.07	-0.09	-0.09	7.4	7.4	308.4	300.4	267.0	259.8
Std Dv	3.1	3.0	2.2	1.6	0.37	0.33	0.10	0.10	0.4	0.4	33.0	35.5	8.4	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
1	85.4	82.9	87.3	74.7	0.52	0.53	-0.21	-0.22	6.9	7.2	401.0	373.5	363.5	338.6
2	88.6	86.2	88.1	75.4	0.39	0.34	-0.18	-0.18	7.9	8.0	379.7	360.3	356.9	338.6
3	84.6	82.5	85.7	73.1	-0.02	0.06	-0.08	-0.09	7.2	7.5	347.9	338.8	347.6	338.6
4	88.7	86.2	88.7	75.9	0.43	0.46	-0.21	-0.22	7.7	7.9	403.6	378.8	360.8	338.6
52	88.7	86.4	88.9	76.9	1.03	0.95	-0.32	-0.32	7.8	7.6	409.4	372.0	372.6	338.6
53	85.3	83.2	87.0	75.0	0.10	0.13	-0.07	-0.07	6.6	6.8	506.9	495.0	346.8	338.6
54	90.1	87.3	90.7	78.1	1.95	1.62	-0.41	-0.40	7.4	7.3	1019.9	899.4	383.9	338.6
55	84.8	82.4	86.1	73.9	-0.26	-0.19	0.02	0.02	6.5	6.3	397.2	399.5	336.6	338.6
Avg.	87.0	84.6	87.8	75.4	0.52	0.49	-0.18	-0.18	7.2	7.3	483.2	452.2	358.6	338.6
Std Dv	2.4	2.2	1.8	1.7	0.75	0.62	0.15	0.15	0.6	0.6	96.2	201.6	16.4	0.0

TABLE NO. B.4-3.5

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
5	81.9	80.2	81.7	70.4	0.26	0.32	-0.19	-0.19	7.6	7.5	639.9	604.2	508.1	480.0
6											NO TRACKING DATA			
7	82.1	80.3	82.9	70.6	0.51	0.53	-0.23	-0.24	7.1	7.4	542.9	522.8	516.9	480.0
12											NO TRACKING DATA			
13	81.4	79.7	82.1	69.6	-0.12	0.00	-0.09	-0.10	7.1	7.8	532.2	516.1	495.0	480.0
38	84.8	82.6	84.0	72.3	0.36	0.35	-0.19	-0.19	7.7	7.8	647.8	612.2	507.9	480.0
39	81.8	80.1	82.0	71.3	-0.27	-0.12	-0.07	-0.07	7.2	6.6	655.9	640.6	491.5	480.0
Avg.	82.4	80.6	82.5	70.5	0.15	0.22	-0.15	-0.16	7.3	7.4	607.7	579.2	503.9	480.0
Std Dv	1.6	1.4	1.1	1.2	0.38	0.31	0.08	0.08	0.4	0.6	65.0	64.9	12.1	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
34	83.1	80.6	81.3	69.5	-0.10	-0.18	-0.06	-0.08	7.3	7.7	783.7	769.5	638.1	626.6
35	80.8	79.2	80.2	69.2	-0.17	-0.10	-0.10	-0.09	7.6	7.2	775.2	753.2	645.0	626.6
36	82.5	80.3	80.8	69.1	0.21	0.13	-0.14	-0.14	7.9	7.8	718.4	689.5	652.8	626.6
37	-	78.9	80.4	69.0	0.17	0.24	-	-0.18	-	7.5	855.3	809.1	662.4	626.6
Avg.	82.1	79.8	80.7	69.2	0.03	0.02	-0.10	-0.12	7.6	7.6	783.2	755.3	649.6	626.6
Std Dv	1.7	1.0	0.6	0.3	0.23	0.24	0.06	0.07	0.5	0.3	68.8	61.0	12.8	0.0
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
30											NO TRACKING DATA			
31	-	75.8	75.8	64.2	-0.07	-0.33	-	-0.02	-	7.8	834.7	820.7	781.0	775.4
32	-	78.7	78.1	65.7	0.13	-0.37	-	-0.01	-	8.0	918.9	915.8	778.1	775.4
33	78.4	76.6	76.6	64.6	0.28	-0.03	-0.11	-0.11	7.7	7.9	879.1	851.9	800.2	775.4
Avg.	78.4	77.0	76.8	64.8	0.11	-0.24	-0.11	-0.05	7.7	7.9	877.6	865.4	786.4	775.4
Std Dv	-	2.1	1.7	1.1	0.25	0.26	-	0.08	-	0.1	59.6	63.8	17.0	0.0

DOT/TSC
12/23/81

TABLE NO. B.5-2.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
56	98.9	95.5	103.0	90.4	1.08	1.03	-0.30	-0.28	6.3	5.9	199.8	179.1	195.3	175.0
57	98.6	95.0	101.6	88.9	0.78	0.75	-0.24	-0.21	6.9	6.1	193.4	178.3	189.8	175.0
58	98.7	95.7	103.0	90.4	1.25	1.19	-0.36	-0.35	6.6	6.4	204.3	180.0	198.6	175.0
59	98.1	94.4	100.6	87.1	0.07	0.07	-0.03	-0.03	6.9	6.9	266.5	263.6	176.9	175.0
Avs.	98.6	95.1	102.0	89.2	0.79	0.76	-0.23	-0.22	6.7	6.3	216.0	200.2	190.2	175.0
Std Dv	0.4	0.7	1.4	1.9	0.64	0.61	0.18	0.17	0.4	0.5	41.6	51.7	11.7	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
60	96.1	92.7	98.6	85.5	1.67	1.50	-0.41	-0.39	6.7	6.4	378.2	328.1	299.5	259.8
61											NO TRACKING DATA			
62	94.7	91.3	96.9	84.2	1.51	1.38	-0.42	-0.38	7.2	6.7	301.1	263.8	296.5	259.8
63	96.7	94.0	97.9	86.2	-0.14	-0.13	0.03	0.03	7.2	6.5	258.5	261.1	257.3	259.8
Avs.	95.9	92.7	97.8	85.3	1.01	0.92	-0.27	-0.25	7.0	6.5	312.6	284.3	284.4	259.8
Std Dv	1.5	1.9	1.2	1.4	1.42	1.28	0.36	0.34	0.5	0.2	85.8	53.6	33.3	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
64											NO TRACKING DATA			
65											NO TRACKING DATA			
66	92.4	89.7	93.1	80.8	0.40	0.36	-0.12	-0.12	7.7	7.5	351.5	338.8	351.4	338.6
67	94.8	92.3	94.6	83.4	-0.13	-0.11	0.03	0.03	7.9	7.0	337.7	340.5	335.8	338.6
Avs.	93.6	91.0	93.8	82.1	0.13	0.12	-0.04	-0.04	7.8	7.2	344.6	339.6	343.6	338.6
Std Dv	1.7	1.8	1.0	1.9	0.37	0.33	0.11	0.11	0.1	0.4	9.8	1.2	11.0	0.0

TABLE NO. B.5-3.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 5　　SIDELINE - 150 M. SOUTH　　JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
68	89.5	86.9	90.2	78.6	0.42	0.38	-0.10	-0.10	6.7	6.4	545.5	526.3	497.5	480.0
69	91.9	89.6	91.1	80.3	-0.01	0.00	-0.01	-0.01	7.7	6.6	491.0	489.5	481.5	480.0
70	89.1	86.4	88.9	77.1	0.31	0.29	-0.08	-0.09	6.9	7.1	540.3	525.4	493.7	480.0
71	92.3	89.8	92.6	81.8	-0.33	-0.31	0.08	0.07	6.9	6.0	473.5	485.6	468.0	480.0
Avs.	90.7	88.2	90.7	79.4	0.10	0.09	-0.03	-0.03	7.1	6.5	512.6	506.7	485.2	480.0
Std Dv	2.0	2.1	1.9	2.5	0.41	0.38	0.10	0.10	0.5	0.6	43.9	27.2	16.3	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
72											NO TRACKING DATA			
73	88.4	85.8	87.7	74.9	0.09	0.09	-0.04	-0.04	7.4	7.5	1090.9	1078.7	633.7	626.6
74	88.1	85.6	90.5	77.9	0.73	0.44	-0.10	-0.10	5.8	5.8	1133.2	1090.2	651.3	626.6
75	89.6	86.9	87.1	75.7	0.01	0.01	-0.02	-0.01	7.8	7.3	633.1	630.2	629.5	626.6
Avs.	88.7	86.1	88.5	76.1	0.28	0.18	-0.05	-0.05	7.0	6.9	952.4	933.0	638.2	626.6
Std Dv	1.1	1.0	2.6	2.3	0.56	0.32	0.06	0.06	1.5	1.3	319.3	302.8	16.4	0.0
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
76	85.0	82.2	82.7	70.5	0.57	0.53	-0.16	-0.16	7.9	7.6	961.2	917.3	812.5	775.4
77											NO TRACKING DATA			
Avs.	85.0	82.2	82.7	70.5	0.57	0.53	-0.16	-0.16	7.9	7.6	961.2	917.3	812.5	775.4
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.4-1.5G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
40	95.1	92.1	93.6	80.8	-0.22	-0.14	0.01	0.01	7.8	7.7	202.1	202.7	191.1	191.7
42	95.9	93.3	96.2	83.1	-0.57	-0.49	0.12	0.12	7.2	7.1	186.6	194.1	184.3	191.7
44	97.2	94.0	96.6	83.3	0.31	0.32	-0.13	-0.13	7.4	7.4	199.6	191.7	199.6	191.7
46	99.9	96.6	98.1	84.7	-0.15	-0.13	0.03	0.03	7.9	7.9	205.8	207.5	190.2	191.7
48	96.7	93.9	95.2	83.1	0.12	0.14	-0.08	-0.07	8.3	7.8	197.5	193.4	195.8	191.7
50											NO TRACKING DATA			
Avs.	96.9	94.0	95.9	83.0	-0.10	-0.06	-0.01	-0.01	7.7	7.6	198.3	197.9	192.2	191.7
Std Dv	2.1	1.9	1.9	1.6	0.39	0.36	0.11	0.11	0.5	0.4	8.4	7.9	6.7	0.0
TAKEOFF														
41	95.0	91.9	97.6	84.0	0.82	0.80	-0.27	-0.29	7.0	7.6	220.8	202.0	198.0	181.1
43	95.3	92.3	97.2	84.5	1.16	1.11	-0.38	-0.37	7.3	7.1	228.2	202.8	203.9	181.1
45											NO TRACKING DATA			
47	96.3	93.4	99.1	86.7	1.33	1.24	-0.39	-0.39	6.7	6.8	213.7	187.3	206.8	181.1
49	96.3	93.6	98.4	87.0	1.34	1.26	-0.42	-0.38	7.2	6.6	207.7	181.7	207.1	181.1
51											NO TRACKING DATA			
Avs.	95.7	92.8	98.1	85.5	1.16	1.10	-0.36	-0.36	7.1	7.0	217.6	193.4	203.9	181.1
Std Dv	0.8	1.1	1.0	1.9	0.30	0.26	0.08	0.06	0.3	0.5	10.8	12.9	5.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS														
18	94.1	91.1	95.5	82.2	-0.18	-0.10	-0.02	-0.02	7.4	7.3	220.3	218.8	215.2	213.8
19	90.9	88.3	93.6	80.6	-0.91	-0.74	0.15	0.15	6.9	7.1	271.6	285.2	203.6	213.8
20											NO TRACKING DATA			
21	90.7	88.5	93.4	80.9	-1.28	-1.09	0.25	0.26	7.0	7.1	241.2	262.3	196.6	213.8
22	94.1	91.1	96.3	83.1	-0.61	-0.49	0.09	0.09	6.9	6.9	212.5	219.2	207.3	213.8
23	90.5	88.2	93.1	80.3	-0.57	-0.43	0.06	0.07	7.0	7.4	266.4	272.0	209.4	213.8
Avs.	92.1	89.4	94.4	81.4	-0.71	-0.57	0.11	0.11	7.0	7.2	242.4	251.5	206.4	213.8
Std Dv	2.1	1.8	1.6	1.4	0.47	0.43	0.12	0.12	0.2	0.2	30.6	35.5	8.0	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS														
24											NO TRACKING DATA			
25	92.0	89.6	95.6	83.3	-0.34	-0.25	0.02	0.02	6.4	6.5	228.1	229.9	212.1	213.8
26	95.5	92.7	97.2	84.4	-0.25	-0.19	0.01	0.01	7.4	7.1	218.7	219.4	213.1	213.8
27	91.4	89.1	94.7	82.2	-0.96	-0.83	0.18	0.19	6.5	6.7	224.5	239.4	200.5	213.8
28	95.0	92.2	97.2	84.1	-0.27	-0.24	0.03	0.03	6.7	6.7	218.1	220.1	211.9	213.8
29	90.9	88.6	93.7	81.1	-1.42	-1.28	0.30	0.31	6.6	6.9	246.1	272.9	192.9	213.8
Avs.	93.0	90.4	95.7	83.0	-0.65	-0.56	0.11	0.11	6.7	6.8	227.1	236.3	206.1	213.8
Std Dv	2.5	2.2	1.8	1.6	0.60	0.56	0.15	0.15	0.4	0.3	13.2	25.4	10.4	0.0

TABLE NO. B.4-2.5G

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
10	98.1	95.1	101.5	88.3	0.54	0.54	-0.21	-0.21	7.1	7.2	211.3	197.3	188.1	175.6
11	95.1	91.9	99.9	86.8	0.42	0.43	-0.16	-0.16	6.3	6.2	228.0	215.0	186.2	175.6
16	96.3	93.3	99.4	86.0	-1.30	-1.16	0.27	0.28	6.8	7.2	207.8	227.7	160.3	175.6
17											NO TRACKING DATA			
Avs.	96.5	93.4	100.3	87.0	-0.11	-0.06	-0.03	-0.03	6.7	6.8	215.7	213.3	178.2	175.6
Std Dv	2.2	2.3	1.6	1.7	1.46	1.35	0.37	0.38	0.5	0.8	15.3	21.6	22.0	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
8	95.3	92.4	97.1	83.8	-0.10	-0.03	-0.05	-0.05	7.3	7.5	276.0	271.8	264.9	260.8
9	91.4	89.1	93.6	81.3	-0.22	-0.13	-0.02	-0.02	7.2	7.3	298.4	296.3	262.7	260.8
14	94.7	92.0	96.3	83.0	0.46	0.46	-0.21	-0.22	7.6	7.8	331.4	311.1	277.9	260.8
15	91.4	88.8	95.0	82.1	-0.09	-0.02	-0.06	-0.06	6.6	6.8	336.0	328.7	266.5	260.8
Avs.	93.2	90.6	95.5	82.6	0.01	0.07	-0.08	-0.09	7.2	7.3	310.5	302.0	268.0	260.8
Std Dv	2.5	2.3	1.8	1.4	0.37	0.32	0.10	0.11	0.5	0.5	34.8	29.5	8.3	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
1	90.2	87.8	92.4	79.4	0.52	0.53	-0.21	-0.23	6.9	7.4	424.4	395.4	364.6	339.7
2	92.7	90.1	93.4	79.9	0.29	0.33	-0.17	-0.18	7.5	7.9	380.9	361.5	357.9	339.7
3	89.6	87.4	90.9	78.5	-0.06	0.03	-0.08	-0.09	7.2	7.5	400.6	390.2	348.7	339.7
4	92.9	90.4	94.3	80.9	0.45	0.44	-0.20	-0.21	7.2	7.4	443.7	416.4	361.9	339.7
52	93.1	90.5	94.6	81.5	1.05	0.98	-0.30	-0.31	7.3	7.6	493.3	448.4	373.7	339.7
53	90.2	88.0	93.0	79.8	0.11	0.13	-0.07	-0.08	6.4	7.3	472.5	461.3	347.9	339.7
54	94.3	91.4	96.4	83.4	1.83	1.68	-0.35	-0.35	6.4	6.4	1020.8	900.8	385.0	339.7
55	89.7	87.2	91.4	79.1	-0.25	-0.19	0.02	0.02	6.1	7.3	398.6	400.9	337.7	339.7
Avs.	91.6	89.1	93.3	80.3	0.49	0.49	-0.17	-0.18	6.9	7.4	504.3	471.9	359.7	339.7
Std Dv	2.0	1.8	1.9	1.7	0.72	0.64	0.13	0.13	0.5	0.4	89.8	190.4	16.4	0.0

TABLE NO. B.4-3.5G

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA - MAIN ROTOR RPM 107%

DOT/TSC
12/23/81

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
5	86.7	85.1	87.4	75.2	0.27	0.33	-0.18	-0.19	7.4	7.7	612.2	578.0	509.6	481.2
6											NO TRACKING DATA			
7	86.7	84.9	88.0	75.7	0.51	0.53	-0.23	-0.24	7.2	7.5	583.9	542.4	518.0	481.2
12											NO TRACKING DATA			
13	85.9	84.2	87.6	75.7	-0.13	-0.01	-0.09	-0.09	6.9	7.1	552.9	536.2	496.2	481.2
38	88.7	86.6	88.6	76.1	0.30	0.35	-0.19	-0.19	7.8	7.9	549.4	519.3	509.1	481.2
39	86.3	84.6	88.1	76.0	-0.25	-0.13	-0.07	-0.07	6.4	6.7	626.8	612.2	492.6	481.2
Avs.	86.9	85.1	87.9	75.7	0.14	0.21	-0.15	-0.16	7.1	7.4	585.1	557.6	505.1	481.2
Std Dv	1.2	1.1	0.5	0.4	0.37	0.32	0.08	0.08	0.6	0.6	39.9	43.0	12.1	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
34	86.7	84.5	86.2	73.7	0.03	-0.20	-0.06	-0.06	7.4	7.6	813.9	799.2	639.3	627.8
35	84.6	83.1	84.6	72.8	-0.20	-0.12	-0.09	-0.10	7.5	7.7	833.0	809.3	646.1	627.8
36	86.1	84.1	85.3	73.0	0.16	0.07	-0.14	-0.14	7.6	7.7	866.2	831.4	654.0	627.8
37	84.7	83.2	84.1	72.6	0.24	0.27	-0.19	-0.19	7.7	7.8	685.1	648.2	663.6	627.8
Avs.	85.5	83.7	85.0	73.0	0.06	0.00	-0.12	-0.12	7.6	7.7	799.5	772.0	650.8	627.8
Std Dv	1.3	0.8	1.1	0.6	0.24	0.26	0.07	0.07	0.2	0.1	97.1	102.4	12.8	0.0
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
30											NO TRACKING DATA			
31	82.1	80.4	80.8	69.2	-0.02	-0.32	-0.02	-0.02	7.8	8.0	835.8	829.8	782.2	776.6
32	-	82.6	82.2	70.3	-0.15	-0.43	-	-0.01	-	8.0	969.6	966.3	779.3	776.6
33	82.5	80.8	81.9	70.1	0.44	-0.03	-0.10	-0.10	7.2	7.3	899.8	872.0	801.4	776.6
Avs.	82.3	81.2	81.7	69.9	0.09	-0.26	-0.06	-0.04	7.5	7.7	901.8	889.4	787.6	776.6
Std Dv	0.3	1.7	1.1	0.8	0.44	0.29	0.06	0.07	0.4	0.6	66.0	62.0	17.0	0.0

TABLE NO. B.5-2.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
56	102.7	99.5	107.3	95.2	1.07	1.03	-0.29	-0.27	6.1	5.7	200.4	179.7	195.9	175.6
57	102.3	98.9	106.3	93.3	0.77	0.77	-0.24	-0.22	7.0	6.4	248.1	228.9	190.4	175.6
58	103.0	100.2	107.2	95.3	1.25	1.20	-0.37	-0.36	6.8	6.5	204.9	180.6	199.2	175.6
59	101.3	97.8	104.8	91.5	0.07	0.07	-0.03	-0.03	6.8	6.5	236.5	233.8	177.6	175.6
Avs.	102.3	99.1	106.4	93.8	0.79	0.77	-0.23	-0.22	6.7	6.3	222.5	205.7	190.8	175.6
Std Dv	0.9	1.3	1.4	2.2	0.64	0.61	0.18	0.17	0.5	0.5	28.7	36.3	11.6	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
60	100.2	97.0	104.5	91.1	1.63	1.50	-0.35	-0.38	5.7	6.2	378.9	329.0	300.4	260.8
61											NO TRACKING DATA			
62	-	96.1	101.5	89.4	1.49	1.38	-	-0.37	-	6.5	332.8	291.9	297.4	260.8
63	100.7	98.2	102.5	90.9	-0.15	-0.13	0.03	0.03	7.0	6.4	266.6	269.1	258.3	260.8
Avs.	100.4	97.1	102.8	90.5	0.99	0.92	-0.16	-0.24	6.3	6.4	326.1	296.7	285.3	260.8
Std Dv	0.3	1.6	2.1	1.3	1.40	1.28	0.27	0.33	0.9	0.2	79.9	42.7	33.2	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
64	96.7	94.6	98.2	86.7	0.12	0.11	-0.05	-0.05	7.1	6.9	539.9	531.5	345.1	339.7
65											NO TRACKING DATA			
66	96.6	94.1	97.7	85.7	0.39	0.37	-0.12	-0.12	7.4	7.3	368.3	355.0	352.4	339.7
67	98.4	96.0	99.4	88.1	-0.13	-0.11	0.03	0.02	7.2	6.8	336.9	339.7	336.9	339.7
Avs.	97.3	94.9	98.4	86.8	0.13	0.12	-0.05	-0.05	7.2	7.0	415.0	408.7	344.8	339.7
Std Dv	1.4	1.4	1.3	1.7	0.37	0.34	0.11	0.10	0.3	0.4	154.5	150.7	11.0	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.5-3.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
68	93.6	91.2	95.2	83.4	0.42	0.38	-0.10	-0.10	6.4	6.2	568.2	548.4	498.6	481.2
69	96.0	93.4	96.1	85.1	0.00	0.00	-0.01	-0.01	7.2	6.3	492.1	490.6	482.6	481.2
70	93.1	90.5	93.6	81.5	0.31	0.29	-0.08	-0.09	6.7	7.2	561.5	546.1	494.8	481.2
71	96.0	93.5	97.5	86.3	-0.33	-0.31	0.07	0.06	6.3	5.7	474.6	486.7	469.2	481.2
Avs.	94.7	92.2	95.6	84.1	0.10	0.09	-0.03	-0.03	6.7	6.3	524.1	517.9	486.3	481.2
Std Dv	1.9	1.9	2.0	2.5	0.41	0.38	0.09	0.09	0.5	0.8	58.4	41.4	16.3	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
72											NO TRACKING DATA			
73	92.1	89.4	91.2	79.0	0.09	0.08	-0.04	-0.04	7.6	7.2	640.8	633.6	634.9	627.8
74	91.7	89.6	93.3	82.0	0.48	0.45	-0.11	-0.10	6.3	5.9	1133.9	1090.9	652.5	627.8
75	93.2	90.4	91.6	80.1	0.01	0.01	-0.02	-0.01	7.4	6.9	635.2	632.2	630.7	627.8
Avs.	92.3	89.8	92.0	80.3	0.19	0.18	-0.06	-0.05	7.1	6.7	803.3	785.6	639.3	627.8
Std Dv	1.0	0.7	1.6	2.2	0.36	0.33	0.07	0.06	1.0	0.9	233.8	215.9	16.3	0.0
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
76	89.0	86.2	86.8	74.6	0.57	0.54	-0.16	-0.16	7.9	7.7	835.3	797.3	813.7	776.6
77											NO TRACKING DATA			
Avs.	89.0	86.2	86.8	74.6	0.57	0.54	-0.16	-0.16	7.9	7.7	835.3	797.3	813.7	776.6
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE NO. B.4-1.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 6 SIDELINE - 284 M. NORTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH														
40	89.8	87.3	89.0	77.1	0.10	0.13	-0.08	-0.08	6.9	6.7	361.6	352.2	315.6	307.4
42	90.0	87.7	90.6	78.4	-0.11	-0.07	-0.01	-0.01	6.2	6.1	432.4	430.2	308.9	307.4
44	90.2	88.0	88.2	76.2	-0.37	-0.32	0.07	0.07	7.7	7.6	310.5	317.2	300.9	307.4
46	90.9	88.8	91.2	79.1	0.09	0.11	-0.05	-0.05	6.4	6.4	380.2	372.8	313.5	307.4
48	88.5	86.0	87.3	74.6	-0.19	-0.16	0.03	0.03	7.3	7.4	316.7	319.3	304.9	307.4
50											NO TRACKING DATA			
Avg.	89.9	87.5	89.3	77.1	-0.10	-0.06	-0.01	-0.01	6.9	6.8	360.3	358.4	308.8	307.4
Std Dv	1.0	1.2	1.9	2.0	0.23	0.22	0.07	0.07	0.7	0.7	57.7	53.6	7.0	0.0
TAKEOFF														
41	89.3	85.5	89.8	74.8	-0.02	0.01	-0.06	-0.06	7.3	7.5	323.3	317.1	306.9	301.0
43	89.2	85.5	90.1	74.9	0.81	0.77	-0.26	-0.26	7.3	7.3	584.4	539.0	326.3	301.0
45											NO TRACKING DATA			
47	89.6	86.1	89.7	76.8	0.07	0.08	-0.06	-0.06	7.7	6.9	330.4	324.2	306.7	301.0
49	88.2	84.4	88.4	75.5	0.21	0.23	-0.10	-0.10	7.6	7.2	319.6	309.7	310.7	301.0
51	88.7	85.3	89.3	75.6	0.07	0.08	-0.07	-0.06	7.6	6.8	319.8	313.6	307.0	301.0
Avg.	89.0	85.3	89.5	75.5	0.23	0.23	-0.11	-0.11	7.5	7.1	375.5	360.7	311.[illegible]	301.0
Std Dv	0.7	0.7	0.8	0.9	0.39	0.36	0.10	0.10	0.2	0.3	134.9	115.3	9.7	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 109 KTS														
18	85.6	82.9	86.5	72.8	-0.59	-0.39	0.03	0.03	6.7	7.2	349.8	353.7	318.0	321.5
19	86.8	84.6	87.4	75.7	0.38	0.38	-0.20	-0.19	7.6	7.2	498.0	469.2	341.3	321.5
20											NO TRACKING DATA			
21	86.8	84.5	88.1	75.7	0.19	0.30	-0.17	-0.17	7.2	7.2	434.9	412.3	339.1	321.5
22	85.0	82.2	85.2	72.4	-0.77	-0.59	0.11	0.11	7.2	7.3	312.9	324.2	310.3	321.5
23	86.4	84.1	86.9	74.7	0.58	0.55	-0.24	-0.24	7.5	7.5	383.0	356.2	345.7	321.5
Avg.	86.1	83.7	86.8	74.3	-0.04	0.05	-0.09	-0.09	7.3	7.3	395.7	383.1	330.9	321.5
Std Dv	0.9	1.2	1.2	1.8	0.70	0.58	0.18	0.18	0.4	0.1	83.9	66.6	18.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 124 KTS														
24											NO TRACKING DATA			
25	87.6	85.8	89.5	77.9	0.13	0.16	-0.11	-0.11	6.8	6.6	386.8	372.6	333.8	321.5
26	86.4	83.8	88.1	75.1	-0.58	-0.46	0.06	0.06	6.5	6.8	321.0	327.6	315.0	321.5
27	87.9	85.9	89.6	77.4	0.32	0.30	-0.16	-0.16	7.3	7.4	361.9	344.4	337.8	321.5
28	86.7	83.8	87.1	74.1	-0.51	-0.45	0.07	0.07	7.4	7.4	325.0	331.8	315.0	321.5
29	88.8	86.6	91.0	79.0	1.17	0.95	-0.33	-0.32	7.1	6.9	397.4	357.4	357.5	321.5
Avg.	87.5	85.2	89.1	76.7	0.11	0.10	-0.09	-0.09	7.0	7.0	358.4	346.8	331.8	321.5
Std Dv	1.1	1.5	1.7	2.3	0.82	0.68	0.19	0.19	0.4	0.5	40.2	21.4	20.5	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.4-2.6

SIKORSKY S-76 SPIRIT HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 6   SIDELINE - 284 M. NORTH   JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
10											NO TRACKING DATA			
11	89.7	87.1	92.9	79.4	0.35	0.35	-0.15	-0.16	6.6	7.2	337.7	320.8	313.4	297.8
16	88.6	85.3	90.5	77.5	0.44	0.46	-0.20	-0.20	7.4	7.2	328.5	308.3	317.3	297.8
17											NO TRACKING DATA			
Avg.	89.1	86.2	91.7	78.5	0.39	0.40	-0.17	-0.18	7.0	7.2	333.1	314.6	315.4	297.8
Std Dv	0.8	1.3	1.7	1.3	0.06	0.08	0.04	0.03	0.6	0.0	6.5	8.9	2.7	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
8											NO TRACKING DATA			
9											NO TRACKING DATA			
14	86.5	83.1	88.2	73.6	-0.32	-0.32	0.02	0.02	6.7	7.5	441.8	445.0	351.8	354.3
15	88.2	85.3	91.5	77.4	0.45	0.44	-0.17	-0.19	6.2	7.0	469.3	440.5	377.4	354.3
Avg.	87.4	84.2	89.9	75.5	0.06	0.06	-0.07	-0.08	6.4	7.2	455.6	442.8	364.6	354.3
Std Dv	1.2	1.5	2.4	2.7	0.54	0.54	0.13	0.15	0.4	0.4	19.4	3.1	18.1	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
1											NO TRACKING DATA			
2											NO TRACKING DATA			
3											NO TRACKING DATA			
4											NO TRACKING DATA			
52	85.6	82.8	85.9	73.0	-0.70	-0.56	0.11	0.11	7.3	7.3	437.7	453.7	400.9	415.6
53	87.6	84.9	89.2	76.1	1.34	1.19	-0.33	-0.34	6.7	7.0	485.4	433.7	465.1	415.6
54	86.9	83.7	86.9	73.8	0.90	0.85	-0.24	-0.25	7.2	7.4	1083.2	1003.3	448.6	415.6
55	88.3	85.7	90.8	78.4	0.58	0.55	-0.17	-0.17	6.8	6.6	853.1	805.4	440.2	415.6
Avg.	87.1	84.3	88.2	75.3	0.53	0.51	-0.16	-0.16	7.0	7.1	714.9	674.0	438.7	415.6
Std Dv	1.4	1.6	2.7	3.0	1.07	0.93	0.23	0.24	0.3	0.4	272.6	248.6	33.4	0.0

DOT/TSC
12/23/81

TABLE NO. B.4-3.6

SIKORSKY S-76 SPIRIT HELICOPTER

CORRECTION DATA - MAIN ROTOR RPM 107%

SITE: 6 SIDELINE - 284 M. NORTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
5											NO TRACKING DATA			
6											NO TRACKING DATA			
7											NO TRACKING DATA			
12											NO TRACKING DATA			
13	83.6	80.7	84.2	70.7	0.65	0.58	-0.25	-0.25	7.4	7.4	704.1	651.3	580.6	537.1
38	83.9	81.0	82.4	69.3	-0.41	-0.41	0.03	0.03	7.6	8.0	645.8	650.8	532.9	537.1
39	84.6	82.1	84.1	71.5	0.38	0.41	-0.21	-0.21	7.8	7.8	580.2	545.2	571.6	537.1
Avs.	84.0	81.3	83.6	70.5	0.21	0.19	-0.14	-0.14	7.6	7.8	643.3	615.8	561.7	537.1
Std Dv	0.8	1.0	1.5	1.6	0.78	0.75	0.21	0.21	0.2	0.4	87.6	86.4	35.9	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
34	82.8	80.2	82.4	69.8	0.02	-0.12	-0.06	-0.06	7.1	7.4	697.4	684.8	683.7	671.3
35	82.9	80.5	81.3	69.2	-0.17	-0.17	-0.07	-0.07	8.0	7.9	722.9	709.0	684.5	671.3
36	82.6	79.7	80.4	68.7	0.13	0.09	-0.11	-0.12	7.2	7.5	726.0	700.2	696.1	671.3
37	82.7	80.0	81.6	69.3	0.27	0.19	-0.15	-0.15	7.5	7.4	852.9	813.6	703.7	671.3
Avs.	82.7	80.1	81.4	69.3	0.06	-0.00	-0.10	-0.10	7.5	7.5	749.8	726.9	692.0	671.3
Std Dv	0.1	0.4	1.0	0.6	0.23	0.21	0.05	0.05	0.5	0.3	85.6	71.9	11.8	0.0
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 140 KTS														
30											NO TRACKING DATA			
31	81.3	78.1	80.8	67.7	1.09	0.60	-0.23	-0.23	7.1	7.1	1041.1	966.3	874.8	812.0
32	81.7	78.8	79.4	68.0	0.51	-0.15	-0.06	-0.05	7.6	7.1	839.3	825.5	825.6	812.0
33	83.4	80.1	82.7	70.0	2.19	1.26	-0.40	-0.38	7.5	7.3	1747.2	1548.2	916.3	812.0
Avs.	82.2	79.0	81.0	68.6	1.26	0.57	-0.23	-0.22	7.4	7.2	1209.2	1113.3	872.2	812.0
Std Dv	1.5	1.4	2.4	1.8	1.21	1.00	0.24	0.23	0.4	0.2	369.9	287.8	64.2	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.5-2.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 6 SIDELINE - 284 M. NORTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
56	91.6	87.3	93.7	80.1	-0.65	-0.61	0.17	0.16	6.6	6.2	350.1	371.3	280.8	297.8
57	94.5	90.7	95.8	83.1	-0.45	-0.40	0.10	0.10	7.4	6.9	416.4	430.1	288.3	297.8
58	92.7	88.9	95.4	82.3	-0.70	-0.68	0.17	0.16	6.9	6.2	352.5	373.3	281.1	297.8
59	97.3	93.8	98.6	86.1	0.15	0.16	-0.07	-0.07	6.9	6.9	430.7	421.4	304.4	297.8
Avg.	94.0	90.2	95.9	82.9	-0.41	-0.38	0.09	0.09	6.9	6.6	387.4	399.0	288.6	297.8
Std Dv	3.0	3.4	2.5	3.0	0.48	0.47	0.14	0.13	0.4	0.5	51.6	38.1	13.5	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 152 KTS														
60	91.3	88.0	91.6	78.9	-1.61	-1.54	0.45	0.43	7.5	7.2	458.3	525.5	308.9	354.3
61											NO TRACKING DATA			
62	93.2	89.0	92.7	79.2	-1.16	-1.12	0.29	0.30	7.0	7.0	417.9	460.4	321.6	354.3
63	95.5	92.8	96.1	83.2	0.04	0.05	-0.03	-0.04	7.1	7.3	434.8	430.0	358.2	354.3
Avg.	93.3	89.9	93.5	80.4	-0.91	-0.87	0.24	0.23	7.2	7.2	437.0	472.0	329.6	354.3
Std Dv	3.0	3.6	3.3	3.4	1.21	1.17	0.35	0.34	0.4	0.2	28.7	69.0	36.2	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
64	94.1	90.9	93.5	81.7	-0.50	-0.47	0.14	0.13	8.1	7.5	577.9	600.8	399.7	415.6
65											NO TRACKING DATA			
66	92.8	89.8	92.4	80.1	-0.59	-0.53	0.17	0.15	8.0	7.2	570.6	598.6	396.2	415.6
67	91.7	88.7	91.1	78.7	-0.02	-0.02	-0.01	-0.01	7.5	7.2	417.4	416.6	416.4	415.6
Avg.	92.9	89.8	92.3	80.2	-0.37	-0.34	0.10	0.09	7.9	7.3	522.0	538.6	404.1	415.6
Std Dv	1.7	1.6	1.7	2.2	0.43	0.39	0.14	0.12	0.5	0.3	128.2	149.5	15.3	0.0

TABLE NO. B.5-3.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/23/81

CORRECTION DATA

SITE: 6 SIDELINE - 284 M. NORTH JUNE 25,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
68	90.8	88.1	90.0	78.4	-0.65	-0.61	0.15	0.14	7.0	6.6	730.1	767.3	511.0	537.1
69	89.3	86.1	87.8	76.0	-0.14	-0.13	0.02	0.02	7.0	7.3	533.2	537.1	533.2	537.1
70	91.7	88.8	91.9	78.6	-0.28	-0.24	0.04	0.05	6.7	7.2	1220.6	1238.5	529.3	537.1
71	90.4	87.0	87.9	76.0	0.05	0.06	-0.03	-0.03	7.9	7.5	551.6	546.5	542.1	537.1
Avs.	90.6	87.5	89.4	77.2	-0.25	-0.23	0.04	0.04	7.1	7.2	758.9	772.4	528.9	537.1
Std Dv	1.2	1.5	2.4	1.8	0.36	0.35	0.09	0.09	0.6	0.4	217.6	230.6	16.0	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
72											NO TRACKING DATA			
73	-	85.5	86.5	75.2	0.09	0.09	-	-0.04	-	7.2	679.6	671.5	679.3	671.3
74	90.0	87.4	90.2	77.0	-0.28	-0.25	0.05	0.05	6.9	7.2	1090.7	1108.3	660.6	671.3
75	88.5	85.6	86.6	73.9	0.12	0.12	-0.04	-0.04	7.1	7.2	1011.9	997.7	680.9	671.3
Avs.	89.2	86.2	87.8	75.4	-0.02	-0.01	0.00	-0.01	7.0	7.2	927.4	925.9	673.6	671.3
Std Dv	1.1	1.5	3.0	2.2	0.32	0.29	0.06	0.07	0.1	0.0	247.8	254.3	15.9	0.0
2500 FT. FLYBY - TARGET INDICATED AIRSPEED 152 KTS														
76	88.4	86.1	87.1	76.4	-0.13	-0.11	0.02	0.01	7.1	6.2	809.6	814.0	807.7	812.0
77											NO TRACKING DATA			
Avs.	88.4	86.1	87.1	76.4	-0.13	-0.11	0.02	0.01	7.1	6.2	809.6	814.0	807.7	812.0
Std Dv	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BEST DOCUMENT AVAILABLE

TABLE NO. B.6-2.1

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/24/81

SITE: 1　　CENTERLINE - CENTER　　JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
1	89.1	85.7	92.5	78.7	-2.42	-2.31	0.63	0.66	5.9	6.1	78.5	100.4	70.6	90.2
2	88.0	84.4	92.1	78.2	-1.75	-1.67	0.44	0.47	5.9	6.2	81.1	96.6	75.8	90.2
3	88.6	85.2	92.6	78.5	-2.46	-2.37	0.61	0.66	5.8	6.3	103.1	131.3	70.8	90.2
4	88.1	84.7	92.6	78.7	-2.89	-2.76	0.67	0.72	5.4	5.8	104.2	138.5	67.9	90.2
Avs.	88.5	85.0	92.5	78.5	-2.38	-2.28	0.59	0.63	5.8	6.1	91.7	116.7	71.3	90.2
Std Dv	0.6	0.7	0.3	0.3	0.58	0.55	0.12	0.13	0.3	0.3	16.9	26.0	4.0	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
5	84.5	81.6	84.5	71.3	-2.76	-2.55	0.75	0.77	7.2	7.3	206.9	263.3	166.7	212.1
6	82.6	79.6	82.6	70.2	-1.37	-1.27	0.35	0.33	7.6	7.1	237.1	263.6	190.8	212.1
7	84.3	81.1	83.9	71.0	-1.93	-1.77	0.52	0.50	7.2	7.0	187.2	221.2	179.5	212.1
8	83.1	80.0	83.1	70.4	-1.73	-1.58	0.44	0.42	7.6	7.2	303.8	347.5	185.5	212.1
Avs.	83.6	80.6	83.5	70.7	-1.95	-1.79	0.51	0.50	7.4	7.2	233.7	273.9	180.6	212.1
Std Dv	1.2	1.1	1.1	0.6	0.72	0.67	0.21	0.23	0.3	0.2	62.5	64.8	12.7	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
9	82.1	79.3	80.6	68.1	-1.53	-1.39	0.39	0.40	7.5	7.5	277.2	312.8	269.0	303.6
10	81.2	78.6	81.1	68.5	-1.89	-1.67	0.43	0.43	7.2	7.2	482.1	552.8	264.8	303.6
11	82.4	79.9	81.1	68.1	-1.09	-0.97	0.26	0.27	7.6	7.8	302.2	326.7	280.7	303.6
12	80.4	77.6	79.6	66.9	-1.14	-1.03	0.28	0.27	7.5	7.3	280.5	305.4	278.7	303.6
Avs.	81.6	78.8	80.6	67.9	-1.41	-1.26	0.34	0.34	7.4	7.4	335.5	374.4	273.3	303.6
Std Dv	1.1	1.2	0.8	0.8	0.46	0.40	0.10	0.10	0.2	0.3	120.5	146.0	9.4	0.0

TABLE NO. B.6-3.1

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/24/81

SITE: 1 CENTERLINE - CENTER JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
13	79.1	76.7	76.5	63.9	-1.64	-1.43	0.38	0.36	7.5	7.1	443.8	498.7	405.8	456.0
14	77.4	74.7	76.1	63.3	-1.42	-1.25	0.28	0.28	7.1	7.1	489.0	535.3	416.6	456.0
15	78.7	76.1	75.6	63.0	-1.48	-1.31	0.31	0.33	7.2	7.6	454.2	502.1	412.5	456.0
16	77.6	74.9	75.3	62.7	-1.22	-1.05	0.24	0.24	7.5	7.5	479.4	516.5	423.2	456.0
Avg.	78.2	75.6	75.9	63.2	-1.44	-1.26	0.30	0.30	7.3	7.3	466.6	513.1	414.5	456.0
Std Dv	1.0	1.2	0.7	0.6	0.21	0.19	0.07	0.07	0.3	0.3	25.9	20.4	9.0	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
17											NO TRACKING DATA			
18	75.2	72.9	72.1	59.7	-0.61	-0.51	0.08	0.08	7.8	7.7	593.5	608.5	593.4	608.4
19	76.1	73.8	72.9	60.3	-0.67	-0.54	0.08	0.08	7.3	7.4	709.8	728.2	593.0	608.4
Avg.	75.7	73.3	72.5	60.0	-0.64	-0.52	0.08	0.08	7.6	7.6	651.6	668.3	593.2	608.4
Std Dv	0.6	0.6	0.6	0.4	0.04	0.02	0.00	0.00	0.3	0.2	82.2	84.6	0.3	0.0

TABLE NO. B.7-1.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 1

CENTERLINE - CENTER

JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS														
22	98.8	94.6	102.5	88.4	0.71	0.71	-0.23	-0.22	6.4	6.3	134.3	123.8	128.2	118.2
24	97.7	93.1	101.5	86.7	0.32	0.32	-0.10	-0.11	6.1	6.4	130.5	125.6	122.9	118.2
26	97.7	93.3	100.4	86.2	-0.31	-0.27	0.08	0.08	6.9	6.7	121.6	124.9	115.1	118.2
28	97.7	93.4	101.7	87.3	0.35	0.36	-0.11	-0.11	6.2	6.1	131.5	126.0	123.4	118.2
Avs.	98.0	93.6	101.5	87.2	0.27	0.28	-0.09	-0.09	6.4	6.4	129.5	125.1	122.4	118.2
Std Dv	0.7	0.8	1.0	1.2	0.52	0.50	0.16	0.15	0.4	0.3	6.7	1.2	6.7	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS														
30	97.3	93.1	100.5	86.6	0.00	0.02	-0.01	-0.01	6.3	6.0	148.7	147.9	118.9	118.2
32	99.3	94.6	101.2	86.3	0.33	0.33	-0.12	-0.12	7.1	7.2	151.7	145.8	123.0	118.2
34	96.4	92.6	98.3	84.6	0.52	0.51	-0.17	-0.17	6.8	6.7	170.2	160.4	125.4	118.2
36											NO TRACKING DATA			
Avs.	97.7	93.4	100.0	85.8	0.28	0.29	-0.10	-0.10	6.7	6.6	156.8	151.4	122.4	118.2
Std Dv	2.0	1.5	2.1	1.5	0.37	0.35	0.12	0.12	0.5	0.9	16.5	11.2	4.7	0.0
APPROACH - BEST RATE OF CLIMB														
38	97.8	93.6	99.9	86.2	0.17	0.18	-0.07	-0.06	6.9	6.4	151.9	148.6	120.9	118.2
40	97.3	92.9	100.7	86.2	0.36	0.36	-0.12	-0.12	6.6	6.5	135.9	130.3	123.3	118.2
42	97.9	93.7	101.6	86.9	0.33	0.34	-0.10	-0.10	6.1	5.9	139.9	134.5	123.0	118.2
Avs.	97.7	93.4	100.8	86.5	0.29	0.29	-0.10	-0.09	6.5	6.3	142.6	137.8	122.4	118.2
Std Dv	0.4	0.6	1.2	0.6	0.14	0.14	0.04	0.04	0.5	0.4	11.8	13.6	1.9	0.0

TABLE NO. B.7-2.1

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 1 CENTERLINE - CENTER JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
TAKEOFF - HOVER POWER PLUS 10%														
21	89.4	84.1	90.6	75.1	-1.69	-1.68	0.47	0.49	6.9	7.2	120.6	141.0	118.5	138.6
23	89.2	83.9	90.2	75.4	-2.16	-2.14	0.63	0.62	7.0	7.0	112.9	138.8	112.8	138.6
25	89.1	84.0	89.9	75.7	-2.02	-1.82	0.53	0.53	7.1	7.0	118.9	141.6	116.4	138.6
27	88.9	84.1	89.9	75.8	-2.20	-1.98	0.59	0.59	7.0	7.0	114.7	139.2	114.2	138.6
29	88.8	83.6	90.2	75.7	-1.60	-1.44	0.40	0.40	6.7	6.8	123.5	141.4	121.0	138.6
31	91.3	86.2	92.2	77.4	-0.72	-0.64	0.17	0.17	7.2	7.1	132.6	139.9	131.3	138.6
33	90.5	85.6	91.1	76.7	-1.33	-1.22	0.36	0.35	7.4	7.1	125.4	140.5	123.7	138.6
Avs.	89.6	84.5	90.6	76.0	-1.67	-1.56	0.45	0.45	7.1	7.0	121.2	140.4	119.7	138.6
Std Dv	1.0	1.1	0.9	0.9	0.58	0.56	0.17	0.17	0.2	0.1	7.3	1.2	7.0	0.0
TAKEOFF - MAXIMUM POWER														
35	91.8	87.0	93.4	79.4	1.33	1.25	-0.41	-0.39	7.1	6.7	180.6	158.1	158.3	138.6
37											NO TRACKING DATA			
39	91.6	86.6	92.6	78.1	0.52	0.51	-0.19	-0.18	7.4	7.1	148.0	139.7	146.9	138.6
41	91.7	86.8	92.6	78.0	2.03	1.88	-0.64	-0.64	7.7	7.6	187.3	154.4	168.1	138.6
Avs.	91.7	86.8	92.8	78.5	1.29	1.21	-0.41	-0.40	7.4	7.2	172.0	150.8	157.8	138.6
Std Dv	0.1	0.3	0.7	1.2	1.07	0.97	0.32	0.33	0.4	0.6	29.7	13.8	15.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%														
43											NO TRACKING DATA			
44	95.1	90.9	98.0	84.3	0.02	0.02	-0.03	-0.02	6.9	6.6	197.9	196.2	152.5	151.2
45	96.0	91.7	98.2	84.8	0.99	0.95	-0.33	-0.31	7.4	6.9	227.6	205.4	167.6	151.2
46	94.2	90.1	97.6	83.4	-0.54	-0.51	0.12	0.13	6.3	6.5	202.5	211.7	144.6	151.2
47	96.3	92.4	98.6	84.8	-0.09	-0.07	0.01	0.01	7.3	7.3	223.7	224.1	150.9	151.2
Avs.	95.4	91.3	98.1	84.3	0.09	0.10	-0.06	-0.05	7.0	6.8	212.9	209.4	153.9	151.2
Std Dv	1.2	1.3	0.5	0.8	0.79	0.75	0.24	0.23	0.6	0.5	18.3	14.4	11.9	0.0

TABLE NO. B.6-2.1H

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/26/81

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
1	90.1	86.2	94.6	80.1	-2.81	-2.64	0.67	0.72	5.6	6.0	61.9	81.6	61.8	81.4
2	89.4	85.3	94.1	79.7	-2.16	-1.96	0.49	0.48	5.8	5.7	92.4	112.3	66.9	81.4
3	90.0	85.9	94.8	80.1	-2.99	-2.75	0.69	0.71	5.9	6.1	96.5	126.6	62.0	81.4
4	89.5	85.5	94.7	80.0	-3.51	-3.21	0.73	0.78	5.3	5.6	97.7	134.5	59.1	81.4
Avs.	89.7	85.7	94.6	80.0	-2.87	-2.64	0.64	0.67	5.6	5.8	87.1	113.8	62.5	81.4
Std Dv	0.4	0.5	0.3	0.2	0.68	0.63	0.13	0.16	0.3	0.3	20.8	28.6	4.0	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
5	84.9	82.0	86.0	72.6	-3.21	-2.81	0.77	0.78	7.1	7.1	199.1	256.3	158.0	203.3
6	81.8	78.7	83.6	70.7	-1.69	-1.43	0.33	0.33	7.0	6.8	209.2	233.4	182.2	203.3
7	83.0	79.8	84.1	70.9	-2.38	-2.08	0.55	0.52	7.2	6.8	189.3	225.5	170.7	203.3
8	81.9	78.8	83.7	70.5	-2.09	-1.78	0.42	0.42	6.9	6.8	218.1	250.9	176.7	203.3
Avs.	82.9	79.8	84.4	71.2	-2.34	-2.02	0.52	0.51	7.0	6.9	203.9	241.5	171.9	203.3
Std Dv	1.8	1.9	1.4	1.2	0.79	0.72	0.23	0.24	0.1	0.2	15.3	17.7	12.8	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
9	82.3	79.4	81.3	68.3	-1.76	-1.55	0.42	0.41	7.7	7.6	290.1	328.6	260.2	294.7
10	81.6	79.2	80.7	68.1	-2.19	-1.79	0.45	0.45	7.4	7.4	258.4	297.5	256.0	294.7
11	-	78.6	80.2	67.1	-1.13	-1.02	-	0.27	-	7.8	306.5	331.8	272.3	294.7
12	79.8	76.8	79.4	66.8	-1.21	-1.10	0.27	0.26	7.2	6.9	301.1	328.6	270.0	294.7
Avs.	81.2	78.5	80.4	67.6	-1.57	-1.36	0.38	0.35	7.4	7.4	289.0	321.6	264.6	294.7
Std Dv	1.8	1.5	1.0	0.9	0.61	0.45	0.14	0.12	0.4	0.5	26.4	19.8	9.5	0.0

TABLE NO. B.6-3.1H

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/26/81

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
13	78.4	75.6	76.2	63.1	-1.79	-1.55	0.39	0.40	7.6	7.6	544.3	613.2	396.9	447.1
14	76.4	73.7	74.7	62.2	-1.43	-1.24	0.29	0.28	7.3	7.1	481.1	527.3	408.0	447.1
15	77.6	74.9	75.0	62.0	-1.58	-1.35	0.33	0.34	7.5	7.7	534.5	591.9	403.8	447.1
16	76.9	74.1	75.0	62.1	-1.25	-1.08	0.24	0.24	7.3	7.3	488.4	526.8	414.5	447.1
Avg.	77.3	74.6	75.2	62.4	-1.51	-1.30	0.31	0.31	7.4	7.4	512.1	564.8	405.8	447.1
Std Dv	1.0	1.1	0.8	0.7	0.28	0.24	0.08	0.09	0.2	0.4	39.1	54.4	9.0	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
17											NO TRACKING DATA			
18	75.2	72.4	71.7	59.0	-0.75	-0.56	0.09	0.08	7.8	7.7	828.8	850.0	584.6	599.5
19	75.9	73.0	72.3	59.6	-0.76	-0.57	0.08	0.08	7.5	7.4	778.7	799.2	584.2	599.5
Avg.	75.5	72.7	72.0	59.3	-0.75	-0.56	0.08	0.08	7.7	7.6	803.7	824.6	584.4	599.5
Std Dv	0.5	0.4	0.5	0.4	0.01	0.01	0.01	0.00	0.2	0.2	35.4	35.9	0.3	0.0

TABLE NO. B.7-1.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS														
22	99.1	94.6	103.3	88.7	0.78	0.76	-0.23	-0.23	6.1	6.1	135.0	123.7	119.6	109.5
24	98.1	93.4	102.5	87.7	0.34	0.34	-0.11	-0.10	5.9	5.7	131.2	125.8	114.2	109.5
26	98.8	93.8	102.4	86.5	-0.35	-0.32	0.08	0.09	6.6	7.0	122.1	125.8	106.4	109.5
28	98.6	93.9	102.4	87.8	0.38	0.38	-0.13	-0.13	6.5	6.4	116.6	111.4	114.6	109.5
Avg.	98.7	94.0	102.7	87.7	0.29	0.29	-0.10	-0.09	6.3	6.3	126.2	121.7	113.7	109.5
Std Dv	0.6	0.6	0.5	1.1	0.57	0.55	0.16	0.16	0.4	0.6	10.3	8.5	6.7	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS														
30	98.3	93.9	101.5	87.4	-0.01	0.01	-0.01	-0.01	6.5	5.9	128.3	127.6	110.1	109.5
32	98.3	93.6	101.5	86.5	0.36	0.36	-0.12	-0.12	6.3	6.4	119.9	114.9	114.2	109.5
34	96.0	91.7	98.0	84.3	0.56	0.55	-0.19	-0.19	6.9	6.8	138.0	129.6	116.6	109.5
36	96.7	92.2	98.8	84.9	0.47	0.47	-0.16	-0.15	7.0	6.5	148.0	140.1	115.6	109.5
Avg.	97.3	92.9	100.0	85.8	0.34	0.35	-0.12	-0.12	6.7	6.4	133.5	128.1	114.1	109.5
Std Dv	1.4	1.3	2.2	1.8	0.31	0.29	0.10	0.09	0.4	0.5	14.9	12.7	3.5	0.0
APPROACH - BEST RATE OF CLIMB														
38	97.4	93.0	99.0	84.9	0.18	0.18	-0.07	-0.07	7.2	6.9	112.5	109.9	112.1	109.5
40	97.2	92.6	101.2	86.8	0.39	0.38	-0.12	-0.11	6.1	5.9	119.3	114.1	114.5	109.5
42	97.6	93.1	102.1	87.8	0.37	0.36	-0.10	-0.10	5.6	5.4	122.5	117.5	114.2	109.5
Avg.	97.4	92.9	100.8	86.5	0.31	0.31	-0.10	-0.09	6.3	6.0	118.1	113.8	113.6	109.5
Std Dv	0.3	0.4	2.3	2.1	0.16	0.16	0.04	0.03	1.1	1.1	7.3	5.4	1.9	0.0

TABLE NO. B.7-2.1H

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 1H CENTERLINE - CENTER (10-METER) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
TAKEOFF - HOVER POWER PLUS 10%														
21	91.6	86.1	92.4	76.8	-2.05	-1.92	0.54	0.55	7.4	7.5	112.2	132.8	109.9	130.0
23	92.3	86.8	92.9	77.7	-2.53	-2.44	0.63	0.61	6.5	6.3	107.5	134.2	104.2	130.0
25	92.2	86.5	95.3	79.0	-2.18	-2.09	0.50	0.54	6.1	6.6	110.7	133.6	107.7	130.0
27	92.5	86.9	95.4	79.3	-2.38	-2.29	0.55	0.59	6.1	6.6	106.3	130.9	105.6	130.0
29	91.9	86.2	95.5	79.2	-1.73	-1.66	0.38	0.41	5.9	6.5	115.0	133.2	112.3	130.0
31	91.5	85.9	94.7	78.2	-0.75	-0.69	0.15	0.17	6.2	6.8	124.3	131.7	122.8	130.0
33	90.8	85.2	93.2	77.3	-1.43	-1.33	0.33	0.34	6.3	6.5	116.2	131.2	115.1	130.0
Avg.	91.8	86.2	94.2	78.2	-1.86	-1.77	0.44	0.46	6.4	6.7	113.2	132.5	111.1	130.0
Std Dv	0.6	0.6	1.5	1.1	0.68	0.67	0.18	0.18	0.5	0.4	6.7	1.4	7.0	0.0
TAKEOFF - MAXIMUM POWER														
35	92.5	86.9	94.9	79.3	1.44	1.37	-0.43	-0.43	6.9	6.9	149.9	130.0	150.0	130.0
37											NO TRACKING DATA			
39	91.9	86.1	94.3	77.9	0.59	0.58	-0.19	-0.20	6.8	7.2	139.9	131.3	138.6	130.0
41	92.6	87.1	94.2	78.5	2.17	2.05	-0.57	-0.58	6.4	6.5	160.0	130.2	159.8	130.0
Avg.	92.3	86.7	94.5	78.5	1.40	1.33	-0.40	-0.40	6.7	6.9	150.0	130.5	149.5	130.0
Std Dv	0.5	0.7	0.5	1.0	1.12	1.04	0.27	0.27	0.4	0.5	14.2	1.0	15.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%														
43											NO TRACKING DATA			
44	94.4	89.8	97.9	83.6	0.01	0.03	-0.03	-0.03	6.4	6.4	147.3	145.9	143.6	142.3
45	95.0	90.3	98.8	84.5	1.08	1.02	-0.29	-0.30	6.2	6.4	171.9	154.1	158.8	142.3
46	93.6	88.9	97.5	83.0	-0.60	-0.53	0.13	0.13	6.1	6.3	135.8	142.3	135.8	142.3
47	95.4	91.4	98.6	84.6	-0.11	-0.07	0.01	0.01	6.7	6.7	145.8	146.1	142.1	142.3
Avg.	94.6	90.1	98.2	83.9	0.09	0.11	-0.04	-0.05	6.4	6.4	150.2	147.1	145.1	142.3
Std Dv	1.0	1.3	0.7	0.9	0.87	0.80	0.22	0.22	0.3	0.2	18.8	6.1	11.9	0.0

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BEST DOCUMENT AVAILABLE

TABLE NO. B.6-2.1G

BELL 206L HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
1	72.6	88.8	96.3	82.5	-2.35	-2.25	0.63	0.64	6.0	6.1	79.6	101.4	71.8	91.4
2	91.6	87.8	95.9	81.9	-1.70	-1.63	0.45	0.46	6.0	6.1	82.5	98.0	77.0	91.4
3	92.1	88.5	96.0	82.0	-2.40	-2.30	0.63	0.65	6.1	6.3	103.9	131.8	72.1	91.4
4	91.5	88.1	96.0	82.1	-2.82	-2.68	0.70	0.71	5.8	5.8	105.0	138.9	69.1	91.4
Avs.	92.0	88.3	96.0	82.1	-2.32	-2.22	0.60	0.61	6.0	6.1	92.8	117.5	72.5	91.4
Std Dv	0.6	0.5	0.2	0.3	0.57	0.53	0.13	0.13	0.2	0.2	16.6	25.5	4.0	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
5	88.0	85.0	89.2	76.0	-2.65	-2.46	0.71	0.72	6.8	6.9	207.8	264.1	167.9	213.4
6	86.3	83.3	86.5	73.8	-1.26	-1.18	0.35	0.34	7.6	7.4	204.3	227.1	191.9	213.4
7	87.6	84.3	88.3	74.6	-1.92	-1.79	0.51	0.51	7.0	7.1	233.3	275.4	180.7	213.4
8	86.4	83.4	87.2	73.9	-1.57	-1.47	0.42	0.42	7.2	7.2	227.3	259.8	186.7	213.4
Avs.	87.1	84.0	87.8	74.6	-1.85	-1.72	0.50	0.50	7.1	7.1	218.2	256.6	181.8	213.4
Std Dv	1.0	1.0	1.4	1.2	0.73	0.67	0.19	0.20	0.4	0.2	17.5	25.4	12.7	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
9	85.7	82.9	85.3	72.3	-1.47	-1.34	0.38	0.38	7.3	7.3	278.5	314.1	270.2	304.8
10	84.1	81.5	83.7	70.7	-2.02	-1.82	0.44	0.45	7.4	7.6	516.6	592.0	266.0	304.8
11	85.7	83.2	85.4	72.2	-1.04	-0.95	0.25	0.25	7.2	7.5	315.8	341.4	281.9	304.8
12	83.9	81.2	83.8	70.9	-1.14	-1.04	0.27	0.26	7.2	7.2	328.1	357.2	280.0	304.8
Avs.	84.9	82.2	84.5	71.5	-1.42	-1.29	0.33	0.33	7.3	7.4	359.7	401.2	274.5	304.8
Std Dv	1.2	1.2	1.1	1.1	0.54	0.48	0.11	0.12	0.1	0.2	130.6	157.3	9.4	0.0

DOT/TSC
12/28/81

TABLE NO. B.6-3.1G

BELL 206L HELICOPTER

CORRECTION DATA

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
13	83.0	80.3	81.3	68.0	-1.60	-1.43	0.37	0.38	7.4	7.6	474.3	532.8	407.0	457.2
14	81.6	79.0	80.2	67.3	-1.33	-1.20	0.28	0.28	7.2	7.2	475.3	520.2	417.8	457.2
15	82.6	79.9	80.4	67.4	-1.41	-1.25	0.32	0.33	7.4	7.6	469.8	519.1	413.7	457.2
16	82.5	80.4	81.1	68.6	-1.79	-1.43	0.24	0.24	7.4	7.6	706.2	760.7	424.4	457.2
Avg.	82.4	79.9	80.7	67.8	-1.53	-1.33	0.30	0.31	7.3	7.5	531.4	583.2	415.7	457.2
Std Dv	0.7	0.8	0.6	0.7	0.25	0.15	0.07	0.07	0.1	0.2	142.7	145.1	9.0	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
17											NO TRACKING DATA			
18	79.4	77.1	77.2	64.3	-0.62	-0.51	0.08	0.08	7.6	7.6	698.0	715.6	594.6	609.6
19	-	77.7	77.8	64.8	-0.63	-0.52	-	0.08	-	7.6	679.2	696.8	594.2	609.6
Avg.	79.4	77.4	77.5	64.5	-0.62	-0.51	0.08	0.08	7.6	7.6	688.6	706.2	594.4	609.6
Std Dv	-	0.4	0.4	0.4	0.01	0.01	-	0.00	-	0.0	13.2	13.2	0.3	0.0

TABLE NO. B.7-1.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/28/81

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS														
22	102.5	98.6	106.0	92.6	0.70	0.70	-0.23	-0.22	6.5	6.2	145.0	133.7	129.4	119.4
24	101.4	97.4	105.4	91.5	0.31	0.32	-0.10	-0.10	6.0	6.0	141.1	135.8	124.1	119.4
26	102.1	97.9	105.0	91.2	-0.30	-0.26	0.08	0.07	6.7	6.5	123.0	126.3	116.3	119.4
28	102.0	97.9	105.1	91.6	0.35	0.36	-0.12	-0.12	6.6	6.3	126.8	121.6	124.6	119.4
Avs.	102.0	98.0	105.4	91.7	0.26	0.28	-0.09	-0.09	6.5	6.2	134.0	129.3	123.6	119.4
Std Dv	0.5	0.6	0.6	0.7	0.51	0.49	0.16	0.15	0.4	0.2	13.1	8.1	6.7	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS														
30	100.9	97.4	103.6	91.0	0.00	0.02	-0.01	-0.01	6.5	5.8	149.7	148.9	120.1	119.4
32	101.4	97.4	103.8	89.0	0.33	0.33	-0.11	-0.12	6.8	7.2	143.2	137.8	124.2	119.4
34	99.5	95.8	100.9	88.2	0.51	0.51	-0.18	-0.16	7.0	6.5	158.8	149.8	126.6	119.4
36	99.9	96.1	102.2	88.9	0.44	0.44	-0.15	-0.14	6.8	6.4	156.8	149.0	125.6	119.4
Avs.	100.5	96.6	102.6	89.3	0.32	0.32	-0.11	-0.11	6.8	6.5	152.1	146.4	124.1	119.4
Std Dv	1.1	1.0	1.7	1.5	0.28	0.27	0.09	0.08	0.3	0.7	8.7	7.0	3.5	0.0
APPROACH - BEST RATE OF CLIMB														
38	100.8	97.0	102.8	88.9	0.17	0.18	-0.07	-0.07	6.8	7.0	124.3	121.6	122.1	119.4
40	100.2	96.3	103.3	89.4	0.36	0.36	-0.12	-0.12	6.8	6.6	146.9	140.8	124.5	119.4
42	101.2	97.3	104.0	90.3	0.34	0.34	-0.10	-0.10	6.1	6.1	141.2	135.8	124.2	119.4
Avs.	100.7	96.8	103.4	89.6	0.29	0.29	-0.10	-0.10	6.6	6.5	137.5	132.8	123.6	119.4
Std Dv	0.7	0.7	0.9	1.0	0.15	0.14	0.04	0.04	0.6	0.7	16.6	14.1	1.9	0.0

TABLE NO. B.7-2.1G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 1G CENTERLINE - CENTER (FLUSH) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
TAKEOFF - HOVER POWER PLUS 10%														
21	90.9	86.0	91.3	77.1	-1.71	-1.48	0.50	0.49	7.4	7.2	134.1	156.6	119.7	139.8
23	93.5	88.4	94.1	79.8	-2.30	-2.06	0.65	0.63	7.4	7.1	130.4	159.9	114.0	139.8
25	93.8	88.4	95.1	80.1	-1.88	-1.72	0.51	0.52	6.8	6.9	120.1	142.8	117.6	139.8
27	94.5	89.2	96.1	80.9	-1.96	-1.90	0.57	0.57	6.9	6.9	119.7	145.0	115.4	139.8
29	93.9	88.4	95.9	80.4	-1.40	-1.36	0.39	0.40	6.7	6.8	129.6	148.3	122.2	139.8
31	94.7	89.3	96.1	80.4	-0.60	-0.58	0.16	0.17	6.9	7.2	137.8	145.4	132.5	139.8
33	94.1	88.9	95.2	80.1	-1.22	-1.13	0.34	0.34	7.1	7.1	129.1	144.4	124.9	139.8
Avs.	93.6	88.4	94.8	79.8	-1.58	-1.46	0.45	0.45	7.0	7.0	128.7	148.9	120.9	139.8
Std Dv	1.4	1.2	1.9	1.4	0.62	0.55	0.18	0.17	0.3	0.2	7.4	7.3	7.0	0.0
TAKEOFF - MAXIMUM POWER														
35	94.9	89.9	95.8	82.5	1.27	1.22	-0.44	-0.38	7.6	6.6	169.1	148.2	159.5	139.8
37											NO TRACKING DATA			
39	94.6	89.4	96.0	80.6	0.52	0.50	-0.18	-0.18	7.1	7.4	148.1	139.8	148.0	139.8
41	95.1	90.0	96.3	81.2	1.96	1.82	-0.63	-0.64	7.6	7.7	169.8	140.2	169.2	139.8
Avs.	94.8	89.8	96.0	81.5	1.25	1.18	-0.42	-0.40	7.5	7.2	162.3	142.8	158.9	139.8
Std Dv	0.4	0.5	0.4	1.4	1.02	0.93	0.32	0.33	0.4	0.8	17.5	6.7	15.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%														
43	99.4	95.4	102.5	89.0	1.22	1.18	-0.40	-0.37	7.1	6.7	173.3	152.4	173.3	152.4
44	98.6	94.3	101.4	88.0	0.02	0.03	-0.03	-0.02	7.1	6.4	198.8	197.1	153.7	152.4
45	99.4	95.4	102.6	89.0	0.96	0.93	-0.31	-0.29	6.9	6.6	170.7	154.1	168.8	152.4
46	97.7	93.5	101.6	87.1	-0.58	-0.50	0.12	0.12	6.1	6.5	203.4	212.5	145.9	152.4
47	99.8	96.0	102.3	89.0	-0.08	-0.06	0.01	0.01	7.2	6.9	156.1	156.4	152.1	152.4
Avs.	99.0	94.9	102.1	88.4	0.31	0.32	-0.12	-0.11	6.9	6.6	180.4	174.5	158.7	152.4
Std Dv	1.0	1.1	0.7	1.0	0.87	0.82	0.26	0.24	0.5	0.2	23.1	32.6	13.5	0.0

TABLE NO. B.6-2.2

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/24/81

SITE: 2 CENTERLINE - 150 M. WEST JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
1	90.4	86.8	93.5	79.8	-2.45	-2.36	0.69	0.68	6.3	6.2	73.3	94.2	70.2	90.2
2	89.4	85.7	93.5	79.8	-1.83	-1.73	0.49	0.46	6.2	5.9	94.1	112.7	75.4	90.2
3	89.7	86.2	93.2	79.3	-2.64	-2.55	0.71	0.74	6.0	6.3	76.5	100.2	68.9	90.2
4	89.4	85.7	93.9	79.7	-2.57	-2.48	0.64	0.67	5.6	5.9	75.2	97.6	69.5	90.2
Avg.	89.7	86.1	93.5	79.6	-2.37	-2.28	0.63	0.64	6.0	6.1	79.8	101.2	71.0	90.2
Std Dv	0.6	0.6	0.3	0.3	0.45	0.46	0.12	0.15	0.4	0.3	11.8	9.9	3.6	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
5	85.4	82.2	85.6	72.3	-2.57	-2.39	0.71	0.71	7.1	7.2	178.8	224.9	168.6	212.1
6	83.8	80.7	85.2	72.3	-1.35	-1.22	0.33	0.32	6.8	6.5	190.7	213.2	189.8	212.1
7	85.1	82.0	85.3	71.8	-1.92	-1.75	0.51	0.50	7.1	7.0	195.2	230.2	179.8	212.1
8	83.8	80.7	84.0	71.5	-1.69	-1.53	0.42	0.40	7.2	6.9	264.6	302.9	185.3	212.1
Avg.	84.5	81.4	85.0	72.0	-1.88	-1.72	0.49	0.48	7.1	6.9	207.3	242.8	180.9	212.1
Std Dv	1.0	1.0	0.9	0.5	0.63	0.61	0.20	0.21	0.2	0.3	47.5	49.9	11.2	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
9	82.9	80.1	81.7	68.7	-1.57	-1.40	0.40	0.40	7.5	7.5	295.9	334.4	268.6	303.6
10	81.7	79.1	81.3	69.2	-1.74	-1.55	0.42	0.41	7.1	6.9	279.7	320.6	264.9	303.6
11	82.8	80.3	82.6	69.4	-1.32	-1.17	0.30	0.30	7.0	7.1	306.0	337.6	275.2	303.6
12	81.4	78.4	81.5	68.8	-1.17	-1.03	0.26	0.25	7.1	6.8	319.5	347.8	278.9	303.6
Avg.	82.2	79.5	81.8	69.0	-1.45	-1.29	0.34	0.34	7.2	7.1	300.3	335.1	271.9	303.6
Std Dv	0.9	1.1	0.7	0.4	0.31	0.28	0.09	0.10	0.3	0.4	20.5	13.8	7.7	0.0

TABLE NO. B.6-3.2

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/24/81

SITE: 2 CENTERLINE - 150 M. WEST JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
13	80.4	77.8	78.1	65.2	-1.71	-1.48	0.37	0.38	7.1	7.2	471.0	531.1	404.4	456.0
14	78.4	75.8	75.9	63.8	-1.27	-1.08	0.26	0.25	7.6	7.3	487.1	527.6	421.0	456.0
15	79.6	77.0	76.7	63.5	-1.59	-1.37	0.36	0.37	7.6	7.9	465.1	518.1	409.4	456.0
16	78.6	76.0	76.4	63.8	-1.29	-1.08	0.24	0.23	7.6	7.5	629.7	676.4	424.5	456.0
Avg.	79.2	76.6	76.8	64.1	-1.47	-1.25	0.31	0.31	7.5	7.5	513.2	563.3	414.8	456.0
Std Dv	1.1	1.2	1.1	0.9	0.27	0.25	0.08	0.10	0.3	0.3	95.8	92.6	11.6	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
17											NO TRACKING DATA			
18	76.6	73.9	74.2	61.3	-0.65	-0.54	0.07	0.07	7.3	7.5	613.4	627.5	594.7	608.4
19	-	74.7	74.2	61.4	-0.65	-0.51	-	0.07	-	7.6	688.0	703.4	595.1	608.4
Avg.	76.6	74.3	74.2	61.3	-0.65	-0.52	0.07	0.07	7.3	7.5	650.7	665.4	594.9	608.4
Std Dv	-	0.5	0.0	0.1	0.00	0.02	-	0.00	-	0.1	52.8	53.7	0.3	0.0

TABLE NO. B.7-1.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/28/81

SITE: 2 CENTERLINE - 150 M. WEST JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS														
22	99.4	94.5	102.4	87.6	0.82	0.81	-0.28	-0.28	7.0	6.8	116.1	105.8	112.6	102.6
24	99.2	94.6	102.6	87.7	0.45	0.46	-0.15	-0.16	6.6	6.9	120.7	114.4	108.2	102.6
26	99.7	94.9	103.7	89.3	-0.56	-0.51	0.15	0.14	6.3	5.9	100.3	105.9	97.1	102.6
28	100.3	95.4	104.8	89.1	0.55	0.55	-0.17	-0.18	6.3	6.6	113.6	106.6	109.3	102.6
Avs.	99.6	94.8	103.4	88.4	0.31	0.33	-0.11	-0.12	6.5	6.6	112.7	108.2	106.8	102.6
Std Dv	0.6	0.5	1.3	1.1	0.74	0.71	0.23	0.22	0.4	0.6	10.7	5.1	8.2	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS														
30	100.2	95.6	104.2	89.8	0.07	0.09	-0.03	-0.03	6.1	6.1	110.7	109.4	103.9	102.6
32	98.2	94.0	102.0	88.3	0.14	0.16	-0.05	-0.05	6.1	5.8	123.5	121.1	104.7	102.6
34	98.5	94.1	101.8	87.4	0.81	0.79	-0.25	-0.24	6.3	6.2	135.5	123.8	112.2	102.6
36	99.8	95.1	102.8	88.3	0.50	0.50	-0.17	-0.17	6.9	6.7	116.3	109.8	108.6	102.6
Avs.	99.2	94.7	102.7	88.5	0.38	0.38	-0.12	-0.12	6.3	6.2	121.5	116.0	107.4	102.6
Std Dv	1.2	1.0	1.4	1.2	0.42	0.40	0.13	0.12	0.5	0.5	13.1	9.2	4.7	0.0
APPROACH - BEST RATE OF CLIMB														
38	98.7	94.3	102.3	86.8	-0.14	-0.11	0.02	0.02	6.2	7.0	129.4	130.1	102.0	102.6
40	98.5	94.2	102.7	87.9	0.33	0.34	-0.11	-0.11	5.8	6.1	114.3	109.6	107.0	102.6
42	99.2	94.5	102.9	87.6	0.29	0.31	-0.11	-0.11	6.3	6.5	120.5	115.9	106.7	102.6
Avs.	98.8	94.3	102.6	87.4	0.16	0.18	-0.07	-0.07	6.1	6.5	121.4	118.5	105.2	102.6
Std Dv	0.5	0.2	0.4	0.8	0.37	0.36	0.11	0.11	0.4	0.7	10.7	14.9	4.0	0.0

TABLE NO. B.7-2.2

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 2 CENTERLINE - 150 M. WEST JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS)			
											(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
TAKEOFF - HOVER POWER PLUS 10%														
21	93.3	87.6	94.9	79.6	-1.49	-1.38	0.36	0.35	6.7	6.5	91.0	102.9	90.7	102.6
23	92.9	87.3	95.3	79.9	-2.21	-2.14	0.58	0.59	6.6	6.8	96.8	118.3	83.9	102.6
25	93.0	87.7	95.3	80.6	-1.97	-1.87	0.52	0.51	6.8	6.5	99.5	118.9	85.9	102.6
27	93.2	87.7	95.5	81.0	-2.28	-2.17	0.58	0.57	6.3	6.2	92.6	114.3	83.1	102.6
29	93.0	87.5	95.4	80.4	-1.10	-1.06	0.27	0.27	6.5	6.5	99.4	109.4	93.2	102.6
31	92.9	87.7	94.9	80.1	-0.74	-0.70	0.18	0.17	6.6	6.2	103.8	110.5	96.4	102.6
33	92.8	87.6	94.7	79.7	-1.43	-1.34	0.36	0.35	6.6	6.4	109.7	124.4	90.4	102.6
Avg.	93.0	87.6	95.1	80.2	-1.60	-1.52	0.41	0.40	6.6	6.5	99.0	114.1	89.1	102.6
Std Dv	0.2	0.2	0.3	0.6	0.63	0.61	0.17	0.17	0.2	0.2	7.0	7.9	5.4	0.0
TAKEOFF - MAXIMUM POWER														
35	93.9	88.6	96.6	81.7	0.74	0.72	-0.23	-0.22	6.5	6.3	140.9	130.1	111.1	102.6
37												NO TRACKING DATA		
39	93.4	88.1	96.1	80.8	-0.42	-0.38	0.07	0.07	6.7	6.5	100.1	102.6	100.1	102.6
41	93.6	88.3	95.8	81.0	1.26	1.23	-0.42	-0.41	7.0	6.8	164.2	143.0	117.8	102.6
Avg.	93.6	88.3	96.2	81.2	0.53	0.52	-0.19	-0.19	6.7	6.5	135.1	125.2	109.7	102.6
Std Dv	0.3	0.4	0.6	0.7	1.22	1.16	0.35	0.34	0.3	0.4	45.8	29.2	12.6	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%														
43	-	91.1	98.1	84.6	1.27	1.20	-	-0.34	-	5.7	442.4	386.1	173.2	151.2
44	95.1	90.7	98.4	84.5	0.05	0.03	-0.07	-0.07	6.6	6.5	261.3	254.8	155.1	151.2
45	95.1	91.1	97.3	83.9	1.00	0.96	-0.35	-0.32	7.1	6.5	299.2	267.1	169.4	151.2
46	93.5	89.3	97.5	82.5	-0.72	-0.69	0.12	0.14	6.2	6.9	267.5	280.0	144.5	151.2
47	95.6	91.7	98.3	84.5	-0.35	-0.25	0.02	0.02	6.9	7.0	480.2	483.1	150.3	151.2
Avg.	94.8	90.8	97.9	84.0	0.25	0.25	-0.07	-0.11	6.7	6.5	350.1	334.2	158.5	151.2
Std Dv	1.1	1.1	0.6	1.0	0.99	0.93	0.25	0.24	0.5	0.6	119.4	113.5	14.3	0.0

TABLE NO. B.6-2.3

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/24/81

SITE: 3 CENTERLINE - 150 M. EAST JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
1	89.5	86.0	92.1	78.2	-2.36	-2.28	0.65	0.69	6.2	6.6	79.2	100.7	71.0	90.2
2	88.6	84.9	92.2	78.8	-1.62	-1.56	0.43	0.42	6.0	5.9	81.7	96.2	76.7	90.2
3	89.7	86.0	92.8	78.5	-2.00	-1.93	0.55	0.58	6.3	6.6	79.4	97.2	73.7	90.2
4	88.7	85.3	92.4	79.3	-3.03	-2.91	0.82	0.79	6.1	5.9	67.3	91.9	66.1	90.2
Avs.	89.1	85.6	92.4	78.7	-2.25	-2.17	0.61	0.62	6.2	6.2	76.9	96.5	71.9	90.2
Std Dv	0.6	0.7	0.4	0.6	0.73	0.70	0.20	0.19	0.2	0.5	8.0	4.4	5.5	0.0
700 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
5	85.2	82.0	84.6	71.6	-2.82	-2.58	0.79	0.82	7.2	7.5	176.9	227.7	164.9	212.1
6	83.3	80.2	83.8	70.9	-1.32	-1.22	0.34	0.33	7.2	7.0	197.5	220.1	190.3	212.1
7	84.9	81.8	84.5	71.1	-1.95	-1.80	0.53	0.53	7.2	7.2	189.0	224.0	179.0	212.1
8	83.8	80.5	84.7	72.2	-1.60	-1.48	0.42	0.39	7.0	6.6	198.1	227.3	184.9	212.1
Avs.	84.3	81.1	84.4	71.4	-1.92	-1.77	0.52	0.52	7.1	7.1	190.4	224.8	179.8	212.1
Std Dv	1.1	1.1	0.5	0.7	0.80	0.72	0.24	0.27	0.1	0.5	12.1	4.3	13.4	0.0
1000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
9	82.7	79.8	81.1	67.8	-1.47	-1.34	0.38	0.39	7.6	7.7	270.4	303.8	270.2	303.6
10												NO TRACKING DATA		
11	82.8	80.3	80.9	69.1	-0.92	-0.82	0.21	0.20	7.7	7.4	294.7	314.0	284.9	303.6
12	81.5	78.3	80.9	68.3	-1.08	-0.98	0.25	0.25	7.1	7.0	284.7	308.7	279.9	303.6
Avs.	82.3	79.5	81.0	68.4	-1.16	-1.05	0.28	0.28	7.5	7.3	283.2	308.8	278.3	303.6
Std Dv	1.0	1.5	0.2	0.9	0.40	0.38	0.13	0.14	0.5	0.5	17.3	7.2	10.6	0.0

TABLE NO. B.6-3.3

BELL 206L HELICOPTER

DOT/TSC
12/24/81

CORRECTION DATA .

SITE: 3 CENTERLINE - 150 M. EAST JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
13	-	77.2	77.1	63.6	-1.55	-1.40	-	0.38	-	7.8	408.1	456.0	408.1	456.0
14	-	75.6	75.8	63.5	-1.42	-1.26	-	0.32	-	7.3	413.5	456.6	413.0	456.0
15	-	75.9	78.1	62.7	-2.38	-2.00	-	0.33	-	8.0	446.9	491.2	414.9	456.0
16	77.2	74.7	77.8	62.3	-3.59	-2.54	0.21	0.25	6.3	7.4	956.7	1034.6	421.7	456.0
Avg.	77.2	75.8	77.2	63.0	-2.23	-1.80	0.21	0.32	6.3	7.6	556.3	609.6	414.4	456.0
Std Dv	-	1.3	1.2	0.8	1.22	0.72	-	0.07	-	0.4	164.8	174.7	6.9	0.0
2000 FT. FLYOVER - TARGET INDICATED AIRSPEED 115 KTS														
17											NO TRACKING DATA			
18	-	73.7	74.2	61.0	-0.63	-0.51	-	0.09	-	7.6	594.3	611.4	591.4	608.4
19	-	74.7	73.9	60.0	-0.67	-0.55	-	0.11	-	8.1	592.4	610.8	590.1	608.4
Avg.	-	74.2	74.0	60.5	-0.65	-0.53	-	0.10	-	7.8	593.3	611.1	590.7	608.4
Std Dv	-	0.7	0.2	0.7	0.03	0.03	-	0.01	-	0.4	1.4	0.4	0.9	0.0

TABLE NO. B.7-1.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

DOT/TSC
12/28/81

SITE: 3 CENTERLINE - 150 M. EAST JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS														
22	98.5	94.1	101.9	87.3	0.46	0.46	-0.15	-0.15	6.3	6.2	142.9	135.3	141.4	133.9
24	98.7	94.0	101.7	86.9	0.26	0.27	-0.09	-0.09	6.6	6.5	142.9	138.3	138.4	133.9
26	98.1	93.6	101.2	86.4	-0.19	-0.15	0.04	0.04	6.4	6.6	138.5	140.3	132.2	133.9
28	97.8	93.8	100.1	85.8	0.26	0.27	-0.10	-0.11	7.3	7.5	143.9	139.2	138.4	133.9
Avg.	98.3	93.8	101.2	86.6	0.20	0.21	-0.07	-0.08	6.7	6.7	142.1	138.3	137.6	133.9
Std Dv	0.5	0.3	0.9	0.8	0.34	0.32	0.10	0.10	0.5	0.7	2.9	2.6	4.7	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS														
30	96.9	92.9	98.9	84.9	-0.10	-0.08	0.01	0.01	6.9	6.7	145.8	146.5	133.2	133.9
32	96.4	92.1	97.7	82.9	0.14	0.16	-0.06	-0.07	7.0	7.4	166.2	162.7	136.8	133.9
34	95.8	92.2	98.3	85.1	-0.06	-0.04	0.00	0.00	6.8	6.5	138.7	138.9	133.7	133.9
36	97.0	92.7	98.2	84.3	-0.03	-0.01	-0.01	-0.01	7.5	7.1	139.1	138.7	134.2	133.9
Avg.	96.5	92.5	98.3	84.3	-0.01	0.01	-0.01	-0.02	7.0	6.9	147.5	146.7	134.5	133.9
Std Dv	0.7	0.4	0.6	1.2	0.13	0.13	0.04	0.04	0.4	0.5	15.8	13.8	1.9	0.0
APPROACH - BEST RATE OF CLIMB														
38	97.9	93.1	98.9	83.4	-0.01	0.01	-0.01	-0.01	7.4	7.9	136.7	136.2	134.4	133.9
40	95.5	91.5	96.1	81.8	0.30	0.30	-0.11	-0.11	7.1	7.1	140.3	135.4	138.7	133.9
42	97.7	93.3	100.4	84.6	0.20	0.21	-0.07	-0.08	6.4	7.2	139.0	135.5	137.3	133.9
Avg.	97.0	92.6	98.4	83.3	0.16	0.17	-0.06	-0.07	7.0	7.4	138.6	135.7	136.8	133.9
Std Dv	1.9	1.4	3.0	2.0	0.22	0.21	0.07	0.07	0.7	0.6	2.6	0.6	3.1	0.0

TABLE NO. B.7-2.3

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 3 CENTERLINE - 150 M. EAST JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
TAKEOFF - HOVER POWER PLUS 10%														
21	88.5	83.4	88.8	73.5	-2.34	-2.15	0.57	0.59	7.1	7.4	175.6	211.4	145.1	174.6
23	89.3	84.2	89.4	74.7	-2.15	-2.10	0.64	0.64	7.5	7.4	145.2	177.1	143.2	174.6
25	89.3	84.4	89.8	75.3	-2.08	-1.86	0.50	0.48	6.7	6.4	154.3	183.2	147.0	174.6
27	89.0	84.1	88.9	74.3	-2.08	-1.86	0.56	0.55	7.5	7.3	153.4	182.3	146.9	174.6
29	88.9	83.8	89.3	74.6	-1.89	-1.68	0.46	0.48	6.9	7.2	160.4	187.3	149.6	174.6
31	89.8	84.9	89.6	75.4	-0.71	-0.61	0.16	0.15	7.4	7.0	172.7	181.6	166.1	174.6
33	89.3	84.5	89.6	75.0	-1.61	-1.42	0.41	0.40	7.4	7.3	184.6	209.5	153.9	174.6
Avg.	89.2	84.2	89.3	74.7	-1.84	-1.67	0.47	0.47	7.2	7.1	163.8	190.4	150.3	174.6
Std Dv	0.5	0.5	0.4	0.7	0.60	0.58	0.17	0.18	0.4	0.4	15.5	15.4	8.5	0.0
TAKEOFF - MAXIMUM POWER														
35	90.3	85.8	90.9	76.6	1.61	1.49	-0.50	-0.51	7.5	7.7	214.1	183.6	203.6	174.6
37												NO TRACKING DATA		
39	90.6	85.6	90.5	76.2	1.00	0.95	-0.32	-0.31	7.4	7.3	214.5	194.4	192.7	174.6
41	90.3	85.7	90.9	76.6	2.34	2.15	-0.68	-0.69	7.5	7.6	250.9	203.4	215.4	174.6
Avg.	90.4	85.7	90.8	76.5	1.65	1.53	-0.50	-0.50	7.5	7.5	226.5	193.8	203.9	174.6
Std Dv	0.2	0.1	0.4	0.3	0.95	0.85	0.25	0.27	0.1	0.3	29.9	14.0	16.0	0.0
500 FT. FLYOVER - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%														
43	95.8	91.7	98.1	84.1	1.21	1.17	-0.41	-0.41	7.4	7.4	175.1	154.1	171.8	151.2
44	95.2	91.2	97.8	84.2	-0.24	-0.22	0.06	0.06	7.2	6.9	156.2	159.1	148.4	151.2
45	96.5	92.3	98.8	84.4	0.98	0.95	-0.31	-0.32	6.7	6.9	179.1	161.2	168.0	151.2
46	94.0	89.9	97.2	83.8	-0.58	-0.51	0.13	0.12	6.5	6.2	156.8	164.1	144.5	151.2
47	96.3	92.5	98.3	84.5	-0.10	-0.08	0.01	0.01	7.2	7.5	170.0	170.4	150.8	151.2
Avg.	95.6	91.5	98.0	84.2	0.25	0.26	-0.10	-0.11	7.0	7.0	167.4	161.8	156.7	151.2
Std Dv	1.2	1.2	0.7	0.3	0.91	0.86	0.28	0.28	0.4	0.6	12.1	7.0	14.3	0.0

BEST DOCUMENT AVAILABLE

BEST DOCUMENT AVAILABLE

TABLE NO. B.6-2.4

BELL 206L HELICOPTER

DOT/TSC
12/26/81

CORRECTION DATA

SITE: 4   SIDELINE - 164 M. NORTH   JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
1	88.3	85.3	89.6	77.0	0.00	0.07	-0.06	-0.06	6.9	6.5	185.6	181.6	178.8	175.0
2	87.5	83.6	90.5	76.4	-0.30	-0.27	0.04	0.04	6.4	6.4	172.7	175.4	172.2	175.0
3	87.5	84.6	88.3	76.1	-0.98	-0.86	0.23	0.22	7.1	6.7	162.2	175.0	162.2	175.0
4	87.8	84.0	89.8	76.2	-0.58	-0.53	0.12	0.12	7.2	6.8	213.2	221.9	168.2	175.0
Avg.	87.8	84.4	89.6	76.4	-0.46	-0.40	0.08	0.08	6.9	6.6	183.4	188.5	170.3	175.0
Std Dv	0.5	0.9	1.1	0.5	0.51	0.48	0.15	0.15	0.4	0.2	27.0	27.5	8.5	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
5	87.3	84.1	89.3	75.6	-0.96	-0.93	0.19	0.20	6.2	6.6	279.8	299.7	242.5	259.8
6	83.1	80.3	83.2	70.6	-2.47	-2.25	0.62	0.61	7.1	7.0	277.7	339.5	212.5	259.8
7	85.9	83.0	86.8	73.9	-1.35	-1.23	0.29	0.29	6.2	6.3	240.6	267.7	233.5	259.8
8	83.6	80.8	83.9	71.2	-1.98	-1.81	0.51	0.52	7.1	7.2	222.4	262.9	219.8	259.8
Avg.	84.9	82.0	85.8	72.8	-1.69	-1.55	0.40	0.40	6.7	6.8	255.1	292.4	227.1	259.8
Std Dv	2.4	2.2	3.4	2.9	0.82	0.72	0.24	0.24	0.6	0.5	34.6	43.3	16.5	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
9	84.8	81.6	85.2	70.7	-0.81	-0.78	0.16	0.17	6.9	7.5	348.1	367.2	321.1	338.6
10	82.1	79.2	81.2	68.3	-1.95	-1.78	0.48	0.50	7.1	7.3	289.9	338.8	289.7	338.6
11	85.9	82.5	86.9	72.1	0.19	0.19	-0.12	-0.12	6.8	7.1	381.4	366.4	352.4	338.6
12	81.5	79.1	81.9	68.9	-1.72	-1.56	0.39	0.41	6.6	6.9	295.9	338.7	295.8	338.6
Avg.	83.6	80.6	83.8	70.0	-1.07	-0.98	0.23	0.24	6.8	7.2	328.8	352.8	314.8	338.6
Std Dv	2.6	2.1	3.3	2.1	1.19	1.09	0.33	0.34	0.3	0.3	53.6	19.8	35.0	0.0

DOT/TSC
12/26/81

TABLE NO. B.6-3.4

BELL 206L HELICOPTER

CORRECTION DATA

SITE: 4 SIDELINE - 164 M. NORTH JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
13	81.6	78.6	81.0	66.5	-1.61	-1.47	0.32	0.36	6.8	7.5	495.9	553.7	429.9	480.0
14	78.8	76.3	76.9	64.9	-2.08	-1.88	0.47	0.47	7.1	7.1	420.5	489.1	412.7	480.0
15	81.9	78.9	81.6	66.8	-0.89	-0.80	0.15	0.16	6.9	7.4	543.4	570.4	457.2	480.0
16	79.2	76.7	76.5	64.0	-1.68	-1.51	0.39	0.39	7.6	7.6	426.4	480.0	426.4	480.0
Avs.	80.3	77.6	79.0	65.5	-1.56	-1.41	0.33	0.34	7.1	7.4	471.6	523.3	431.6	480.0
Std Dv	2.0	1.6	3.3	1.6	0.61	0.55	0.17	0.16	0.4	0.3	72.1	55.6	22.8	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
17											NO TRACKING DATA			
18	77.8	75.0	74.5	62.1	-0.67	-0.55	0.09	0.09	7.6	7.4	617.1	634.5	609.4	626.6
19	79.2	76.4	77.6	63.4	-0.64	-0.52	0.08	0.08	7.1	7.4	726.5	744.8	611.2	626.6
Avs.	78.5	75.7	76.1	62.7	-0.65	-0.53	0.08	0.08	7.4	7.4	671.8	689.6	610.3	626.6
Std Dv	1.0	1.0	2.2	0.9	0.02	0.02	0.01	0.01	0.4	0.0	77.4	78.0	1.2	0.0

TABLE NO. B.7-1.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 4 SIDELINE - 164 M. NORTH JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS														
22	97.5	93.2	98.9	85.2	-0.47	-0.41	0.11	0.11	7.2	7.1	250.4	259.5	184.3	191.0
24	97.9	93.9	100.1	86.9	-0.43	-0.37	0.09	0.09	6.4	5.9	234.7	242.7	184.7	191.0
26	99.2	95.4	101.9	88.1	-0.39	-0.34	0.09	0.09	6.8	6.6	218.3	225.2	185.1	191.0
28	98.7	94.6	101.0	87.4	-0.11	-0.07	0.01	0.01	6.5	6.2	231.1	231.7	190.5	191.0
Avg.	98.3	94.3	100.5	86.9	-0.35	-0.30	0.07	0.07	6.7	6.5	233.7	239.8	186.2	191.0
Std Dv	1.0	1.1	1.6	1.5	0.20	0.19	0.05	0.05	0.4	0.7	16.2	18.4	3.6	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS														
30	94.2	90.3	95.6	80.7	-0.53	-0.48	0.12	0.13	6.4	7.0	182.9	191.1	182.8	191.0
32	94.4	90.5	98.2	84.9	-0.49	-0.43	0.11	0.10	5.8	5.3	191.6	200.0	182.9	191.0
34	93.6	89.8	92.6	78.3	-0.31	-0.25	0.05	0.05	8.1	8.5	460.2	466.4	188.4	191.0
36	94.1	90.5	93.6	79.7	-0.30	-0.26	0.07	0.07	7.7	7.9	211.6	215.9	187.2	191.0
Avg.	94.1	90.3	95.0	80.9	-0.41	-0.35	0.09	0.09	7.0	7.2	261.6	268.3	185.3	191.0
Std Dv	0.4	0.4	3.0	3.5	0.15	0.14	0.04	0.04	1.3	1.7	162.8	162.2	3.6	0.0
APPROACH - BEST RATE OF CLIMB														
38	96.8	92.9	97.4	84.1	0.19	0.21	-0.08	-0.08	7.3	6.8	288.2	280.6	196.1	191.0
40	94.2	90.5	97.7	82.6	0.04	0.05	-0.02	-0.03	5.6	5.8	196.2	194.2	192.9	191.0
42	97.5	93.3	100.6	86.2	0.27	0.28	-0.09	-0.09	5.9	6.1	217.1	210.0	197.4	191.0
Avg.	96.2	92.2	98.6	84.3	0.17	0.18	-0.06	-0.07	6.3	6.2	233.8	228.3	195.5	191.0
Std Dv	2.4	2.1	2.5	2.5	0.17	0.17	0.05	0.05	1.2	0.7	68.2	65.0	3.3	0.0

TABLE NO. B.7-2.4

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 4 SIDELINE - 164 M. NORTH JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
TAKEOFF - HOVER POWER PLUS 10%														
21	92.1	86.9	92.7	78.0	0.10	0.14	-0.09	-0.09	7.5	7.2	216.3	210.5	209.8	204.2
23	91.7	86.3	92.1	77.2	-0.95	-0.81	0.21	0.21	7.2	7.3	194.6	208.0	191.0	204.2
25	92.0	87.2	92.0	78.2	-1.16	-1.00	0.29	0.27	7.8	7.2	188.1	205.3	187.1	204.2
27	92.5	87.7	94.2	79.5	-1.10	-0.96	0.24	0.25	6.8	6.9	191.4	207.6	188.3	204.2
29	91.8	86.9	92.8	78.0	-1.06	-0.89	0.22	0.24	6.8	7.2	189.4	204.3	189.4	204.2
31	91.6	86.9	91.3	77.9	-0.80	-0.67	0.19	0.17	7.8	7.1	194.6	205.9	193.0	204.2
33	91.4	86.8	92.0	77.4	-1.02	-0.87	0.24	0.24	7.1	7.1	191.2	206.4	189.1	204.2
Avg.	91.9	87.0	92.4	78.0	-0.86	-0.72	0.19	0.18	7.3	7.2	195.1	206.9	192.5	204.2
Std Dv	0.4	0.4	1.0	0.8	0.48	0.43	0.14	0.14	0.5	0.1	10.6	2.3	8.6	0.0
TAKEOFF - MAXIMUM POWER														
35	92.1	87.1	93.3	78.4	0.38	0.39	-0.14	-0.14	7.0	7.0	214.4	204.6	214.0	204.2
37												NO TRACKING DATA		
39	-	87.0	92.4	77.9	0.19	0.21	-	-0.09	-	7.1	210.2	204.3	210.1	204.2
41	92.6	87.5	92.8	77.8	1.06	0.97	-0.34	-0.33	7.6	7.4	229.9	207.5	226.2	204.2
Avg.	92.3	87.2	92.8	78.0	0.54	0.52	-0.24	-0.19	7.3	7.2	218.2	205.5	216.8	204.2
Std Dv	0.4	0.4	0.6	0.5	0.65	0.56	0.14	0.18	0.4	0.3	14.6	2.5	11.9	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS TORQUE > 90%														
43	96.5	93.0	99.4	86.5	0.18	0.19	-0.07	-0.06	6.1	5.8	218.5	213.2	218.2	212.9
44	96.7	93.2	99.1	86.0	0.06	0.07	-0.04	-0.04	7.1	6.7	215.8	213.0	215.8	212.9
45	96.5	92.7	99.1	86.3	0.02	0.04	-0.03	-0.03	6.4	6.6	215.0	213.1	214.9	212.9
46	95.2	91.6	97.5	85.0	-0.59	-0.53	0.14	0.13	6.8	6.6	227.9	238.8	203.3	212.9
47	96.4	92.9	98.1	85.5	-0.67	-0.61	0.17	0.16	6.9	6.2	201.0	213.0	200.9	212.9
Avg.	96.3	92.7	98.6	85.8	-0.20	-0.17	0.03	0.03	6.7	6.4	215.7	218.2	210.6	212.9
Std Dv	0.7	0.7	0.9	0.7	0.46	0.43	0.13	0.12	0.5	0.4	11.2	13.3	9.2	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.6-2.5

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/26/81

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
1	87.1	83.7	88.9	75.7	-0.68	-0.63	0.17	0.16	7.1	6.8	165.7	175.0	165.7	175.0
2											NO TRACKING DATA			
3	87.5	84.2	89.7	76.3	-0.46	-0.43	0.10	0.10	7.1	6.8	169.4	175.0	169.4	175.0
4	86.7	84.2	89.1	76.1	-1.14	-0.97	0.24	0.25	6.7	6.9	172.6	187.7	161.0	175.0
Avg.	87.1	84.0	89.2	76.0	-0.76	-0.68	0.17	0.17	7.0	6.8	169.2	179.2	165.3	175.0
Std Dv	0.6	0.4	0.6	0.5	0.49	0.39	0.10	0.11	0.3	0.0	4.9	10.3	6.0	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
5	83.3	80.7	83.9	70.8	-2.75	-2.49	0.69	0.73	6.6	7.0	206.6	263.2	203.9	259.8
6	86.3	82.9	88.3	74.4	0.17	0.16	-0.11	-0.12	7.2	7.3	295.1	284.6	269.4	259.8
7	83.9	81.5	84.9	71.6	-1.29	-1.17	0.30	0.30	6.7	6.8	235.3	261.0	234.2	259.8
8	86.0	82.6	87.6	73.5	-0.38	-0.38	0.05	0.05	7.1	7.4	276.0	280.2	255.9	259.8
Avg.	84.9	81.9	86.2	72.6	-1.06	-0.97	0.23	0.24	6.9	7.1	253.3	272.2	240.9	259.8
Std Dv	1.8	1.3	2.6	2.0	1.56	1.41	0.43	0.45	0.4	0.4	48.8	14.6	35.0	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
9	81.1	78.7	79.6	66.8	-1.73	-1.55	0.46	0.46	7.6	7.5	294.8	339.2	294.3	338.6
10	83.7	80.7	83.2	71.0	-0.92	-0.84	0.21	0.19	7.6	7.1	328.8	349.9	318.2	338.6
11	80.7	78.4	79.2	66.2	-2.30	-2.07	0.59	0.62	7.1	7.5	281.7	340.8	279.9	338.6
12	83.0	79.8	83.4	70.1	-0.33	-0.30	0.02	0.02	7.3	7.1	366.1	368.9	335.9	338.6
Avg.	82.1	79.4	81.4	68.5	-1.32	-1.19	0.32	0.32	7.4	7.3	317.8	349.7	307.1	338.6
Std Dv	1.8	1.3	2.8	2.9	1.07	0.95	0.31	0.33	0.3	0.3	46.3	16.8	30.5	0.0

TABLE NO. B.6-3.5

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/26/81

SITE: 5   SIDELINE - 150 M. SOUTH   JUNE 26,1980

											TRACKING DATA (METERS)			
	CORRECTED				CORRECTIONS (dB)				CONSTANTS		(ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
13	80.0	77.6	76.2	64.0	-1.45	-1.26	0.34	0.32	7.9	7.6	435.3	480.1	435.2	480.0
14	80.3	77.0	79.2	66.1	-0.54	-0.50	0.06	0.06	7.7	7.4	512.9	522.8	470.9	480.0
15	78.6	76.4	75.2	62.7	-1.98	-1.75	0.44	0.45	7.6	7.8	491.1	561.5	419.9	480.0
16	80.2	77.1	79.2	65.6	-0.54	-0.47	0.06	0.07	7.4	7.6	496.7	506.8	470.5	480.0
Avg.	79.7	77.0	77.5	64.6	-1.13	-0.99	0.22	0.22	7.7	7.6	484.0	517.8	449.1	480.0
Std Dv	1.0	0.6	2.5	1.9	0.87	0.76	0.24	0.24	0.2	0.2	41.3	41.7	31.5	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
17											NO TRACKING DATA			
18	77.4	74.5	75.2	62.2	-0.58	-0.49	0.06	0.06	7.5	7.5	644.8	657.3	614.7	626.6
19	77.2	74.7	73.5	60.5	-0.62	-0.49	0.08	0.08	7.9	7.9	612.9	627.4	612.1	626.6
Avg.	77.3	74.6	74.3	61.4	-0.60	-0.49	0.07	0.07	7.7	7.7	628.9	642.4	613.4	626.6
Std Dv	0.2	0.1	1.2	1.2	0.03	0.00	0.01	0.01	0.3	0.3	22.5	21.1	1.8	0.0

TABLE NO. B.7-1.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 5 SIDELINE - 150 M. SOUTH JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS														
22	93.2	89.2	94.6	80.8	0.85	0.82	-0.30	-0.29	7.5	7.3	242.3	220.8	209.6	191.0
24	92.8	88.9	94.2	80.7	0.50	0.49	-0.19	-0.18	7.5	7.1	204.9	193.2	202.6	191.0
26	92.4	88.5	93.8	80.3	-0.01	0.01	-0.03	-0.03	7.3	7.0	207.3	205.2	192.9	191.0
28	91.9	88.0	93.0	79.6	0.26	0.26	-0.11	-0.11	7.3	7.1	200.4	193.6	197.7	191.0
Avg.	92.6	88.7	93.9	80.4	0.40	0.39	-0.16	-0.15	7.4	7.1	213.7	203.2	200.7	191.0
Std Dv	0.7	0.6	0.8	0.7	0.45	0.42	0.14	0.14	0.2	0.2	23.6	15.9	8.7	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS														
30	93.8	90.0	94.1	80.4	0.36	0.36	-0.14	-0.14	7.3	7.1	207.7	198.7	199.6	191.0
32	94.6	90.6	94.0	79.5	0.60	0.59	-0.23	-0.24	8.0	8.3	207.8	194.3	204.3	191.0
34	93.2	89.8	94.4	81.4	0.50	0.49	-0.17	-0.16	6.9	6.5	237.7	224.5	202.2	191.0
36	93.9	90.1	94.2	80.4	0.51	0.50	-0.19	-0.19	7.7	7.6	216.2	204.2	202.2	191.0
Avg.	93.9	90.1	94.2	80.4	0.49	0.48	-0.18	-0.18	7.5	7.4	217.3	205.4	202.1	191.0
Std Dv	0.7	0.4	0.2	0.9	0.12	0.12	0.05	0.05	0.6	0.9	17.3	16.3	2.4	0.0
APPROACH - BEST RATE OF CLIMB														
38	91.2	87.2	91.3	77.7	-0.20	-0.17	0.03	0.03	7.4	7.1	195.6	197.6	189.0	191.0
40	93.1	89.6	93.9	80.3	0.17	0.17	-0.07	-0.07	7.1	7.2	199.9	195.3	195.4	191.0
42	92.0	88.4	92.4	78.7	-0.09	-0.07	0.01	0.01	7.4	7.4	194.4	194.9	190.4	191.0
Avg.	92.1	88.4	92.5	78.9	-0.04	-0.02	-0.01	-0.01	7.3	7.3	196.6	196.0	191.6	191.0
Std Dv	1.4	1.7	1.9	1.9	0.27	0.25	0.07	0.07	0.2	0.2	4.1	2.1	4.8	0.0

TABLE NO. B.7-2.5

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 5

SIDELINE - 150 M. SOUTH

JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
TAKEOFF - HOVER POWER PLUS 10%														
21	89.1	85.0	88.8	74.8	-1.42	-1.20	0.34	0.34	7.4	7.5	184.9	205.4	183.9	204.2
23	89.1	85.2	89.0	75.1	-1.40	-1.15	0.34	0.34	7.6	7.6	186.8	207.1	184.2	204.2
25	89.7	85.7	89.8	76.1	-0.89	-0.70	0.17	0.17	7.4	7.3	192.6	204.4	192.4	204.2
27	89.6	85.6	90.0	76.1	-1.10	-0.89	0.25	0.25	7.3	7.3	189.7	205.3	188.7	204.2
29	90.0	85.8	89.9	76.0	-0.65	-0.52	0.14	0.14	7.7	7.6	198.5	206.9	195.9	204.2
31	89.7	85.6	89.8	76.1	-0.11	-0.05	-0.02	-0.01	7.4	7.2	208.0	207.0	205.2	204.2
33	90.2	86.2	90.6	77.0	-0.43	-0.33	0.08	0.08	7.5	7.3	202.4	207.3	199.4	204.2
Avg.	89.6	85.6	89.7	75.9	-0.86	-0.69	0.19	0.19	7.5	7.4	194.7	206.2	192.8	204.2
Std Dv	0.5	0.4	0.7	0.8	0.54	0.46	0.15	0.14	0.2	0.2	9.4	1.3	8.7	0.0
TAKEOFF - MAXIMUM POWER														
35	89.9	85.7	90.4	76.2	0.81	0.76	-0.28	-0.28	7.8	7.7	225.2	207.3	221.9	204.2
37											NO TRACKING DATA			
39	89.3	85.1	88.6	74.6	0.17	0.19	-0.09	-0.09	7.9	7.9	212.1	206.6	209.6	204.2
41	-	85.0	89.4	74.6	1.02	0.93	-	-0.32	-	7.7	309.4	281.7	224.3	204.2
Avg.	89.6	85.3	89.5	75.1	0.67	0.63	-0.18	-0.23	7.9	7.8	248.9	231.9	218.6	204.2
Std Dv	0.4	0.6	1.3	1.3	0.63	0.55	0.13	0.17	0.1	0.1	74.7	61.0	11.1	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%														
43	95.4	92.1	97.8	85.4	1.10	1.05	-0.32	-0.32	6.7	6.7	257.0	230.2	237.8	212.9
44	95.9	92.2	98.5	85.1	-0.12	-0.10	0.01	0.01	6.6	6.4	217.7	218.8	211.9	212.9
45	95.9	92.4	97.5	85.2	0.98	0.91	-0.30	-0.30	7.2	7.2	266.9	242.5	234.3	212.9
46	95.4	91.8	98.0	85.3	-0.07	-0.04	0.00	0.00	6.3	5.5	242.2	241.8	213.3	212.9
47	96.0	92.6	97.5	85.5	0.44	0.44	-0.15	-0.14	6.9	6.7	261.6	248.9	223.9	212.9
Avg.	95.7	92.2	97.9	85.3	0.47	0.45	-0.15	-0.15	6.7	6.5	249.1	236.4	224.2	212.9
Std Dv	0.4	0.3	0.5	0.2	0.66	0.61	0.18	0.18	0.4	0.7	22.9	13.8	13.7	0.0

TABLE NO. B.6-2.5G

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/26/81

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
1	90.4	86.6	92.5	79.6	-0.80	-0.69	0.17	0.16	7.2	6.6	168.2	177.8	166.2	175.6
2	89.8	86.5	93.3	79.8	-1.00	-0.88	0.19	0.18	6.4	6.3	183.5	196.3	164.2	175.6
3	90.9	87.3	93.0	80.2	-0.56	-0.47	0.11	0.10	7.4	6.9	169.9	175.6	169.9	175.6
4	90.1	86.6	93.4	79.7	-1.17	-1.04	0.23	0.24	6.4	6.5	173.1	188.3	161.5	175.6
Avg.	90.3	86.7	93.0	79.8	-0.88	-0.77	0.18	0.17	6.8	6.6	173.7	184.5	165.4	175.6
Std Dv	0.6	0.4	0.5	0.3	0.32	0.30	0.06	0.07	0.7	0.3	8.4	11.8	4.3	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
5	86.6	84.3	87.1	75.0	-2.95	-2.57	0.75	0.75	7.2	7.1	207.6	264.1	204.9	260.8
6	89.6	86.3	91.7	78.0	0.09	0.12	-0.11	-0.11	7.2	7.2	295.9	285.5	270.3	260.8
7	87.1	84.8	88.0	75.9	-1.50	-1.23	0.32	0.31	7.2	7.0	236.2	262.0	235.2	260.8
8	89.2	86.1	91.6	77.6	-0.54	-0.45	0.05	0.05	6.9	7.3	292.3	296.9	256.8	260.8
Avg.	88.1	85.4	89.6	76.6	-1.22	-1.03	0.25	0.25	7.1	7.2	258.0	277.1	241.8	260.8
Std Dv	1.8	1.2	2.9	1.8	1.62	1.43	0.46	0.46	0.2	0.2	53.1	20.7	34.9	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
9	85.0	82.7	83.9	71.7	-1.82	-1.69	0.46	0.46	7.6	7.5	310.9	357.6	295.4	339.7
10	86.7	84.1	86.5	73.2	-1.42	-1.19	0.20	0.21	7.4	7.7	551.9	587.4	319.2	339.7
11	84.0	82.0	82.6	70.8	-2.39	-2.16	0.63	0.63	7.7	7.7	282.9	341.9	281.1	339.7
12	86.4	83.4	86.5	73.2	-0.35	-0.34	0.03	0.03	7.4	7.4	367.3	370.2	337.0	339.7
Avg.	85.6	83.0	84.9	72.2	-1.49	-1.34	0.33	0.33	7.5	7.6	378.3	414.3	308.2	339.7
Std Dv	1.5	1.1	2.4	1.5	1.05	0.95	0.33	0.33	0.2	0.2	148.2	142.0	30.4	0.0

TABLE NO. B.6-3.56

BELL 204L HELICOPTER

CORRECTION DATA

DOT/TSC
12/26/81

SITE: 56 SIDELINE - 150 M. SOUTH (FLUSH) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SKR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
13	83.1	80.8	80.9	68.3	-1.49	-1.31	0.32	0.33	7.6	7.8	463.1	510.6	436.4	481.2
14	83.3	80.3	82.9	69.6	-0.56	-0.53	0.06	0.06	7.4	7.3	513.8	523.8	472.0	481.2
15	82.0	80.1	79.1	66.9	-1.95	-1.78	0.46	0.46	7.9	8.0	509.0	581.7	421.1	481.2
16	83.5	80.6	82.1	69.5	-0.64	-0.55	0.07	0.07	7.8	7.4	706.5	720.9	471.6	481.2
Avg.	83.0	80.5	81.2	68.6	-1.16	-1.04	0.23	0.23	7.7	7.6	548.1	584.3	450.2	481.2
Std Dv	0.8	0.4	2.0	1.5	0.83	0.75	0.24	0.24	0.3	0.4	132.4	117.8	31.4	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
17											NO TRACKING DATA			
18	80.9	78.1	79.6	66.3	-0.63	-0.55	0.06	0.06	7.5	7.4	715.4	729.2	615.8	627.8
19	80.5	78.3	77.9	65.2	-0.69	-0.57	0.08	0.08	7.6	7.7	763.4	781.4	613.3	627.8
Avg.	80.7	78.2	78.7	65.8	-0.66	-0.56	0.07	0.07	7.6	7.6	739.4	755.3	614.6	627.8
Std Dv	0.3	0.2	1.2	0.8	0.04	0.01	0.01	0.01	0.0	0.2	33.9	36.9	1.8	0.0

BEST DOCUMENT AVAILABLE

DOT/TSC
12/28/81

TABLE NO. B.7-1.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS														
22	97.1	93.1	98.8	84.8	0.85	0.82	-0.30	-0.30	7.4	7.4	210.4	191.8	210.3	191.7
24	96.9	93.0	98.9	84.9	0.48	0.48	-0.18	-0.18	7.0	7.0	205.8	194.1	203.3	191.7
26	96.8	92.6	98.8	84.7	-0.05	0.00	-0.03	-0.03	6.9	7.0	200.7	198.7	193.6	191.7
28											NO TRACKING DATA			
Avs.	96.9	92.9	98.8	84.8	0.43	0.43	-0.17	-0.17	7.1	7.1	205.6	194.8	202.4	191.7
Std Dv	0.2	0.4	0.1	0.2	0.64	0.58	0.19	0.19	0.3	0.3	6.9	5.0	11.9	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS														
30	95.5	91.5	97.3	83.2	0.33	0.34	-0.13	-0.13	6.8	6.9	200.7	192.1	200.3	191.7
32	98.5	94.2	99.2	84.1	0.60	0.58	-0.22	-0.23	7.5	8.0	205.7	192.4	205.0	191.7
34	97.6	93.6	99.0	85.4	0.49	0.49	-0.18	-0.17	7.3	7.0	238.4	225.1	203.0	191.7
36	98.0	94.0	98.8	84.8	0.50	0.49	-0.19	-0.18	7.5	7.4	204.9	193.6	202.9	191.7
Avs.	97.4	93.3	98.6	84.4	0.48	0.47	-0.18	-0.18	7.3	7.3	212.4	200.8	202.8	191.7
Std Dv	1.6	1.5	1.0	1.1	0.14	0.12	0.05	0.05	0.4	0.6	21.4	19.9	2.4	0.0
APPROACH - BEST RATE OF CLIMB														
38	96.0	91.7	97.3	82.8	-0.23	-0.18	0.03	0.03	6.8	6.9	189.8	191.7	189.8	191.7
40	97.1	93.5	99.6	85.4	0.15	0.17	-0.07	-0.07	6.5	7.0	197.4	192.9	196.2	191.7
42	97.0	92.7	98.0	83.2	-0.17	-0.12	0.01	0.01	7.0	7.4	252.2	252.9	191.2	191.7
Avs.	96.7	92.6	98.3	83.8	-0.08	-0.04	-0.01	-0.01	6.8	7.1	213.1	212.5	192.4	191.7
Std Dv	0.9	1.3	1.7	1.9	0.29	0.26	0.07	0.07	0.4	0.4	48.2	49.5	4.8	0.0

TABLE NO. B.7-2.5G

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 5G SIDELINE - 150 M. SOUTH (FLUSH) JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
TAKEOFF - HOVER POWER PLUS 10%														
21	93.2	89.1	94.0	79.7	-1.43	-1.23	0.34	0.35	7.4	7.7	185.7	206.2	184.6	205.0
23	93.4	89.3	93.8	79.9	-1.40	-1.20	0.34	0.34	7.6	7.5	185.3	205.4	184.9	205.0
25	94.3	90.1	95.0	81.2	-0.86	-0.73	0.19	0.19	7.4	7.3	193.3	205.2	193.1	205.0
27	94.3	90.1	95.5	81.4	-1.07	-0.93	0.25	0.25	7.2	7.4	190.4	206.1	189.4	205.0
29	94.2	90.0	94.7	80.9	-0.64	-0.54	0.14	0.14	7.9	7.9	199.3	207.8	196.7	205.0
31	94.4	89.9	95.2	80.9	-0.13	-0.07	-0.01	-0.01	7.3	7.3	212.3	211.4	205.9	205.0
33	95.0	90.6	96.4	82.5	-0.44	-0.36	0.07	0.07	7.1	6.9	200.1	205.0	200.1	205.0
Avg.	94.1	89.9	94.9	80.9	-0.85	-0.72	0.19	0.19	7.4	7.4	195.2	206.7	193.5	205.0
Std Dv	0.7	0.6	1.0	1.0	0.53	0.47	0.15	0.15	0.3	0.3	10.5	2.5	8.7	0.0
TAKEOFF - MAXIMUM POWER														
35	95.1	90.4	96.4	81.9	0.80	0.77	-0.26	-0.26	7.2	7.2	225.9	208.0	222.7	205.0
37											NO TRACKING DATA			
39	94.0	89.4	94.2	79.9	0.16	0.18	-0.09	-0.09	7.8	7.7	216.2	210.6	210.4	205.0
41	94.0	89.4	94.9	79.9	0.97	0.91	-0.31	-0.32	7.6	7.9	226.8	206.5	225.2	205.0
Avg.	94.4	89.7	95.2	80.5	0.64	0.62	-0.22	-0.22	7.5	7.6	223.0	208.4	219.4	205.0
Std Dv	0.9	0.9	1.6	1.6	0.60	0.55	0.16	0.17	0.4	0.6	8.3	3.0	11.2	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%														
43	99.9	97.0	102.9	90.5	1.15	1.06	-0.32	-0.32	6.8	6.6	277.0	248.2	238.7	213.8
45	100.1	97.2	103.2	90.9	0.97	0.91	-0.28	-0.27	6.9	6.6	267.7	243.3	235.2	213.8
46	99.5	95.9	102.9	89.9	-0.06	-0.06	0.00	0.00	6.5	6.3	242.9	242.6	214.1	213.8
47	100.1	97.3	103.4	91.2	0.44	0.43	-0.14	-0.14	6.7	6.4	262.7	250.0	224.7	213.8
Avg.	99.9	96.9	103.1	90.6	0.62	0.58	-0.18	-0.18	6.7	6.5	262.6	246.0	228.2	213.8
Std Dv	0.3	0.8	0.3	0.7	0.67	0.62	0.18	0.18	0.2	0.2	17.6	4.4	13.6	0.0

BEST DOCUMENT AVAILABLE

TABLE NO. B.6-2.6

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/26/81

SITE: 6 SIDELINE - 284 M. NORTH JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
300 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
1	85.0	82.8	84.4	72.0	-0.45	-0.41	0.06	0.06	7.4	7.5	316.5	322.4	292.4	297.8
2	82.5	79.6	82.5	70.4	-0.21	-0.18	-0.01	-0.01	7.6	7.1	298.3	297.8	298.3	297.8
3	84.6	82.3	83.9	71.8	-0.61	-0.56	0.10	0.10	7.6	7.4	321.7	331.9	288.6	297.8
4	82.9	80.1	83.5	71.1	-0.33	-0.29	0.02	0.02	7.5	7.1	317.6	320.0	295.5	297.8
Avs.	83.8	81.2	83.6	71.3	-0.40	-0.36	0.04	0.04	7.5	7.3	313.5	318.0	293.7	297.8
Std Dv	1.5	2.0	1.0	0.9	0.21	0.20	0.06	0.06	0.1	0.2	12.7	17.7	5.1	0.0
700 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
5	84.8	82.2	84.5	72.1	-0.43	-0.31	0.01	0.01	7.2	7.1	388.6	390.2	352.8	354.3
6	81.1	78.6	80.6	68.3	-1.98	-1.85	0.50	0.50	7.2	7.1	302.2	355.1	301.6	354.3
7	83.4	80.9	82.6	70.2	-0.94	-0.85	0.17	0.17	7.2	7.2	375.6	396.9	335.2	354.3
8	81.3	78.6	81.0	68.1	-1.52	-1.40	0.38	0.38	7.2	7.3	314.5	354.7	314.1	354.3
Avs.	82.7	80.1	82.2	69.7	-1.22	-1.10	0.26	0.26	7.2	7.2	345.2	374.2	325.9	354.3
Std Dv	2.2	2.2	2.2	2.3	0.83	0.82	0.27	0.27	0.0	0.1	52.9	27.6	27.8	0.0
1000 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
9	83.1	80.2	82.6	69.9	-0.45	-0.42	0.04	0.04	7.1	7.2	435.5	441.0	410.4	415.6
10	80.2	77.4	79.3	66.3	-1.68	-1.52	0.40	0.40	7.3	7.3	367.2	416.5	366.4	415.6
11	84.4	81.4	84.2	70.8	0.66	0.61	-0.24	-0.25	7.0	7.2	460.0	424.7	450.2	415.6
12	79.3	77.0	79.9	66.4	-1.72	-1.53	0.37	0.40	6.7	7.3	367.0	416.2	366.4	415.6
Avs.	81.8	79.0	81.5	68.3	-0.80	-0.71	0.14	0.15	7.0	7.2	407.4	424.6	398.3	415.6
Std Dv	3.0	2.6	2.8	2.8	1.39	1.26	0.37	0.39	0.3	0.1	58.4	14.2	49.4	0.0

TABLE NO. B.6-3.6

BELL 206L HELICOPTER

CORRECTION DATA

DOT/TSC
12/26/81

SITE: 6　　SIDELINE - 284 M. NORTH　　JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE).	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
1500 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
13	80.1	77.4	77.9	65.1	-1.39	-1.27	0.28	0.29	7.2	7.4	495.4	542.4	490.6	537.1
14	77.0	75.1	74.6	62.9	-2.32	-2.06	0.54	0.54	7.3	7.4	456.8	541.3	453.2	537.1
15	81.4	78.6	80.3	67.0	-0.44	-0.40	0.04	0.04	7.2	7.4	538.4	544.8	530.8	537.1
16	77.9	75.7	75.3	62.9	-1.85	-1.63	0.44	0.43	7.7	7.6	471.6	537.3	471.4	537.1
Avs.	79.1	76.7	77.0	64.5	-1.50	-1.34	0.32	0.32	7.3	7.5	490.6	541.5	486.5	537.1
Std Dv	2.4	2.0	3.2	2.4	0.98	0.86	0.27	0.26	0.3	0.2	43.7	3.9	40.7	0.0
2000 FT. FLYBY - TARGET INDICATED AIRSPEED 115 KTS														
17											NO TRACKING DATA			
18	77.0	74.4	75.3	63.0	-0.69	-0.53	0.08	0.08	7.0	6.8	657.3	675.6	653.1	671.3
19	79.3	76.1	76.4	62.2	-0.66	-0.60	0.07	0.07	7.1	7.6	753.9	771.0	656.4	671.3
Avs.	78.2	75.2	75.9	62.6	-0.67	-0.56	0.07	0.07	7.0	7.2	705.6	723.3	654.8	671.3
Std Dv	1.6	1.2	0.7	0.5	0.02	0.05	0.01	0.01	0.0	0.6	68.3	67.4	2.4	0.0

TABLE NO. B.7-1.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 6 SIDELINE - 284 M. NORTH JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SR	CPA	SRR	CPAR
APPROACH - BEST RATE OF CLIMB PLUS 10 KTS														
22	91.2	88.2	90.9	77.7	-0.58	-0.50	0.13	0.13	7.5	7.7	429.3	446.0	295.9	307.4
24	92.2	89.3	93.2	79.9	-0.51	-0.44	0.09	0.09	7.0	7.2	410.1	422.5	298.4	307.4
26	92.2	89.1	93.7	80.8	-0.33	-0.27	0.06	0.05	6.8	6.5	318.7	324.8	301.6	307.4
28	91.3	88.4	92.3	79.3	-0.22	-0.17	0.02	0.02	6.9	6.8	312.9	315.3	305.0	307.4
Avg.	91.7	88.8	92.5	79.4	-0.41	-0.34	0.07	0.07	7.1	7.1	367.7	377.2	300.2	307.4
Std Dv	0.7	0.6	1.5	1.6	0.20	0.19	0.06	0.06	0.4	0.7	74.1	81.7	4.9	0.0
APPROACH - BEST RATE OF CLIMB MINUS 10 KTS														
30	88.4	85.3	87.6	74.2	-0.55	-0.51	0.10	0.10	7.1	7.2	377.3	389.8	297.6	307.4
32	88.5	85.2	90.7	77.3	-0.50	-0.43	0.09	0.09	5.8	5.9	303.3	314.8	296.2	307.4
34	89.1	86.1	86.8	74.1	-0.38	-0.33	0.06	0.06	8.0	7.9	336.3	342.6	301.7	307.4
36	88.9	86.0	86.9	73.9	-0.42	-0.34	0.07	0.07	7.6	7.6	320.1	327.2	300.7	307.4
Avg.	88.7	85.7	88.0	74.9	-0.46	-0.40	0.08	0.08	7.1	7.1	334.2	343.6	299.1	307.4
Std Dv	0.4	0.6	2.2	2.0	0.09	0.10	0.02	0.02	1.2	1.1	38.8	40.2	3.2	0.0
APPROACH - BEST RATE OF CLIMB														
38	90.4	87.4	92.8	79.4	0.07	0.10	-0.04	-0.04	6.0	5.9	373.6	367.4	312.6	307.4
40	89.3	86.6	88.4	75.4	-0.09	-0.07	0.00	0.00	6.9	7.2	310.7	310.3	307.9	307.4
42	97.0	93.4	97.0	83.3	0.04	0.08	-0.06	-0.06	7.4	7.5	375.5	368.4	313.3	307.4
Avg.	92.3	89.1	92.7	79.3	0.01	0.04	-0.03	-0.03	6.8	6.9	353.3	348.7	311.3	307.4
Std Dv	5.9	5.2	6.1	5.6	0.12	0.13	0.04	0.04	1.0	1.2	52.1	47.1	4.2	0.0

TABLE NO. B.7-2.6

SIKORSKY UH-60A BLACKHAWK HELICOPTER

DOT/TSC
12/28/81

CORRECTION DATA

SITE: 6 SIDELINE - 284 M. NORTH JUNE 26,1980

	CORRECTED				CORRECTIONS (dB)				CONSTANTS		TRACKING DATA (METERS) (ACTUAL)		(REFERENCE)	
EV	EPNL	NEL	PNLTM	dBAM	/\1(P)	/\1(A)	/\2(P)	/\2(A)	K(P)	K(A)	SF	CPA	SRR	CPAR
TAKEOFF - HOVER POWER PLUS 10%														
21	89.4	84.2	88.5	73.7	-0.16	-0.17	0.00	0.00	8.2	7.8	374.2	374.1	315.8	315.8
23	89.2	83.7	89.3	73.8	-0.38	-0.37	0.07	0.07	7.6	7.5	342.1	349.3	309.3	315.8
25	88.7	83.9	88.1	74.7	-0.60	-0.58	0.14	0.12	7.9	6.9	357.3	371.7	303.5	315.8
27	88.4	83.3	88.1	73.9	-0.50	-0.46	0.11	0.10	7.6	7.1	333.5	344.7	305.6	315.8
29	88.2	83.1	88.6	73.3	-0.55	-0.50	0.12	0.12	7.4	7.4	355.7	368.9	304.5	315.8
31	89.1	84.0	89.1	73.7	-0.54	-0.50	0.11	0.12	7.4	7.7	363.8	376.7	305.0	315.8
33	88.4	83.1	88.5	73.0	-0.60	-0.56	0.13	0.13	7.5	7.5	360.3	375.3	303.2	315.8
Avs.	88.8	83.6	88.6	73.7	-0.48	-0.45	0.10	0.09	7.7	7.4	355.3	365.8	306.7	315.8
Std Dv	0.5	0.5	0.5	0.6	0.17	0.15	0.05	0.05	0.3	0.3	14.9	14.4	4.9	0.0
TAKEOFF - MAXIMUM POWER														
35	89.4	84.1	89.5	74.0	0.04	0.03	-0.04	-0.04	7.4	7.6	375.5	371.0	319.7	315.8
37											NO TRACKING DATA			
39	89.6	84.2	90.1	74.7	0.05	0.03	-0.04	-0.04	7.4	7.3	372.9	368.5	319.6	315.9
41	90.0	84.6	90.6	73.9	0.46	0.41	-0.15	-0.16	7.5	8.0	360.4	343.9	331.0	315.8
Avs.	89.7	84.3	90.1	74.2	0.18	0.16	-0.08	-0.08	7.4	7.6	369.6	361.1	323.4	315.8
Std Dv	0.4	0.4	0.7	0.6	0.34	0.31	0.09	0.10	0.1	0.5	11.4	21.2	9.3	0.0
500 FT. FLYBY - TARGET INDICATED AIRSPEED 150 KTS - TORQUE > 90%														
43	94.0	89.8	94.6	81.4	-0.17	-0.16	0.02	0.02	6.7	6.1	356.2	359.2	318.9	321.5
44	94.5	91.4	96.1	83.4	-0.01	0.01	-0.03	-0.03	7.0	6.8	333.1	330.0	324.5	321.5
45	94.1	89.6	95.1	82.1	-0.25	-0.24	0.05	0.04	6.9	6.1	364.4	369.9	316.7	321.5
46	93.4	90.2	95.6	83.2	-0.44	-0.39	0.09	0.08	6.7	6.6	314.9	324.3	312.2	321.5
47	93.8	89.6	94.1	81.5	-0.62	-0.56	0.16	0.14	7.6	6.7	306.9	321.7	306.7	321.5
Avs.	94.0	90.1	95.1	82.3	-0.30	-0.27	0.06	0.05	7.0	6.5	335.1	341.0	315.8	321.5
Std Dv	0.4	0.9	0.9	1.1	0.27	0.25	0.08	0.07	0.4	0.4	28.9	25.4	7.8	0.0

APPENDIX C

HELICOPTER PERFORMANCE AND POSITION DATA

Appendix C

Helicopter Performance and Position Data

This data appendix provides graphic and tabular presentations of helicopter performance and position data. Each sub-appendix contains a series of plots depicting the ground track relative to the microphone array centerline as well as flight profiles showing altitude versus distance along the array. Following the plots a series of tables is presented which shows helicopter position relative to each microphone location. These tables contain the following information:

EVENT	Identifies event number and type of operation.
Recorded Time	This is the range time, synchronized with the cockpit clock when PNLTM occured.
Radiated Time	The time when the PNLTM acoustical energy was radiated.
R/C FPM	This indicates the helicopter rate of climb or descent averaged over 4 seconds centered on PNLTM.
C/D-ANG DEG	The climb or descent angle in degrees averaged over 4 seconds centered on PNLTM.
GS KNOTS	Ground Speed averaged over 4 seconds centered on PNLTM.
CPA Ft.	This is the closest point of approach between the helicopter and the measurement location.
SR Ft.	This is the slant distance between the helicopter and the measurement location at the time of PNLTM.
AR-ANG DEG	This is the acoustical radiation angle between the flight path and SR.

Appendix C

FLIGHT PATH TRACKING PLOTS AND POSITION DATA

Sub-Appendix	Test Session
C1	UH-60A, June 22
C2	S-76 100%, June 23
C3	A-109, June 24
C4	S-76 107%, June 25
C5	UH-60A, June 25
C6	Bell 206-L June 26
C7	UH-60A, June 26

Sub-Appendix C1 Summary
UH60A June 22, 1980
Flight Path Tracking Plots and Position Data

1. FLIGHT PATH TRACKING PLOTS

Event No.	Plot Fig. No.	Operation			
1	C1-1	1000 Ft.	LFO	150 kts	Target Speed
2	"	"	"	"	
3	"	"	"	"	
4	"	"	"	"	
5	"	"	"	"	
39	C1-2	"	"	"	
40	"	"	"	"	
47	"	"	"	"	
48	"	"	"	"	
25	C1-3	500 Ft.	LFO	150 kts	Target Speed
26	"	"	"	132 kts	"
27	"	"	"	115 kts	"
28	"	"	"	152 kts	"
29	"	"	"	132 kts	"
30	"	"	"	115 kts	"
31	C1-4	500 Ft.	LFO	152 kts	Target Speed
32	"	"		132 kts	"
33	"	"		115 kts	"
34	"	"		152 kts	"
35	"	"		132 kts	"
36	"	"		115 kts	"
49	C1-5	500 Ft.	LFO	165 kts	Target Speed
50	"	"		165 kts	"
51	"	"		165 kts	"
52	"	"			

Event No.	Plot Fig. No.	Operation			
41	C1-6	700 Ft.	LFO	150 kts	Target Speed
42	"	"		150 kts	"
43	C1-7	300 Ft.	LFO	150 kts	Target Speed
44	"	"		150 kts	"
37	C1-8	1500 Ft.	LFO	150 kts	Target Speed
38	"	"		150 kts	"
8	C1-9	Takeoff			
9	"	"			
10	"	"			
11	"	"			
12	C1-10	Takeoff			
14	"	"			
15	"	"			
16	C1-11	Approach			
17	"	"			
18	"	"			
19	"	"			
20	"	"			
21	C1-12	Approach			
22	"	"			
23	"	"			
24	"	"			

2. POSITION DATA TABLES

Table Number	Microphone
C1-1	Mic. 1, Centerline Center, 4 ft.
C1-2	Mic. 2, Centerline 150m West 4 ft.
C1-3	Mic. 3, Centerline 150m East 4 ft.
C1-4	Mic. 4, Sideline 164m North 4 ft.
C1-5	Mic. 5, Sideline 150m South 4 ft.
C1-6	Mic. 6, Sideline 284m North 4 ft.
C1-7	Mic. 1G, Centerline Center (Ground)
C1-8	Mic. 1H, Centerline Center 33ft.
C1-9	Mic. 5G, Sideline 150m South (Cround)

FIGURE C1-1

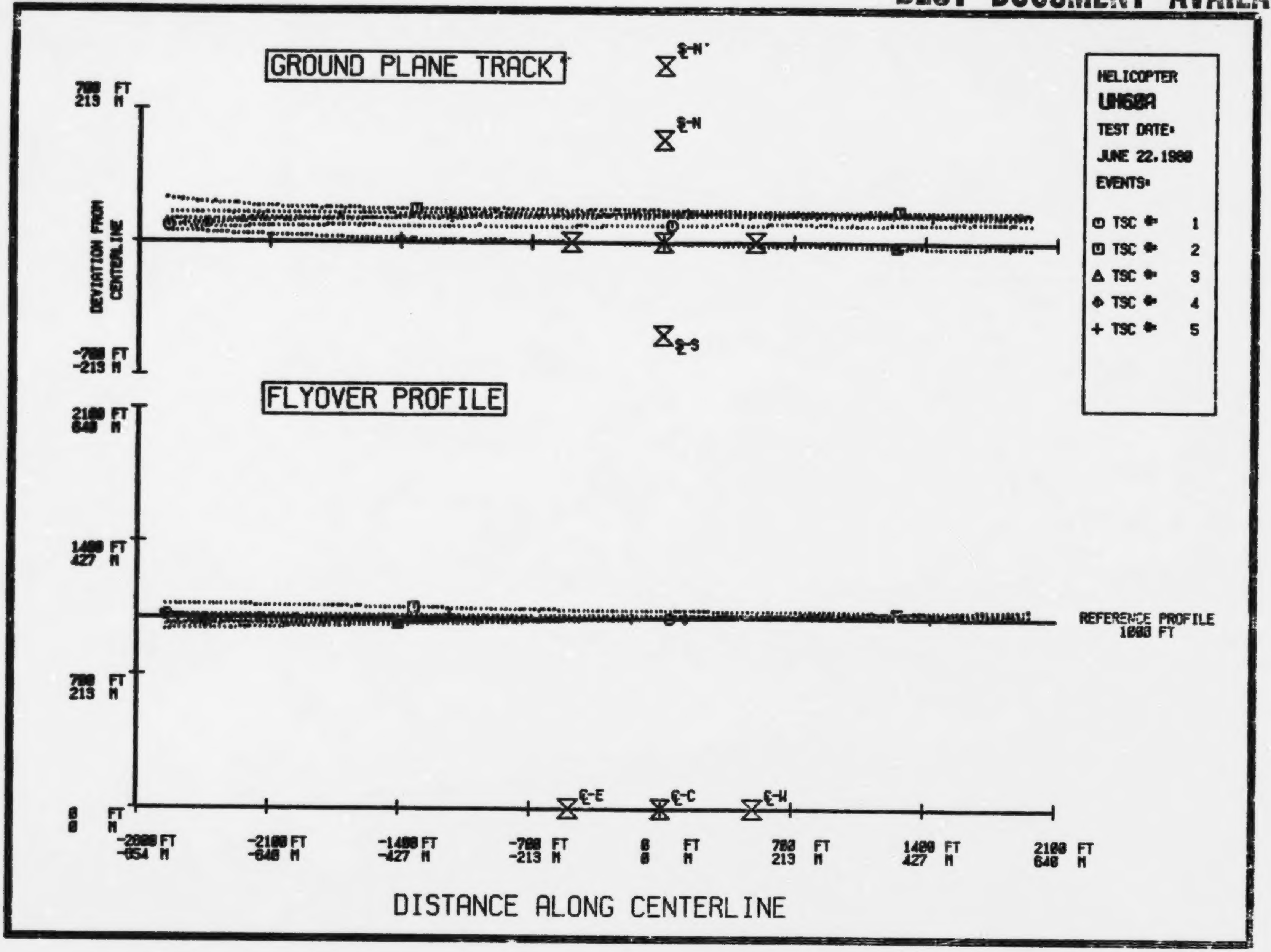

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 22,1980
EVENTS:
○ TSC # 1
□ TSC # 2
△ TSC # 3
◆ TSC # 4
+ TSC # 5
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
1000 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C1-2

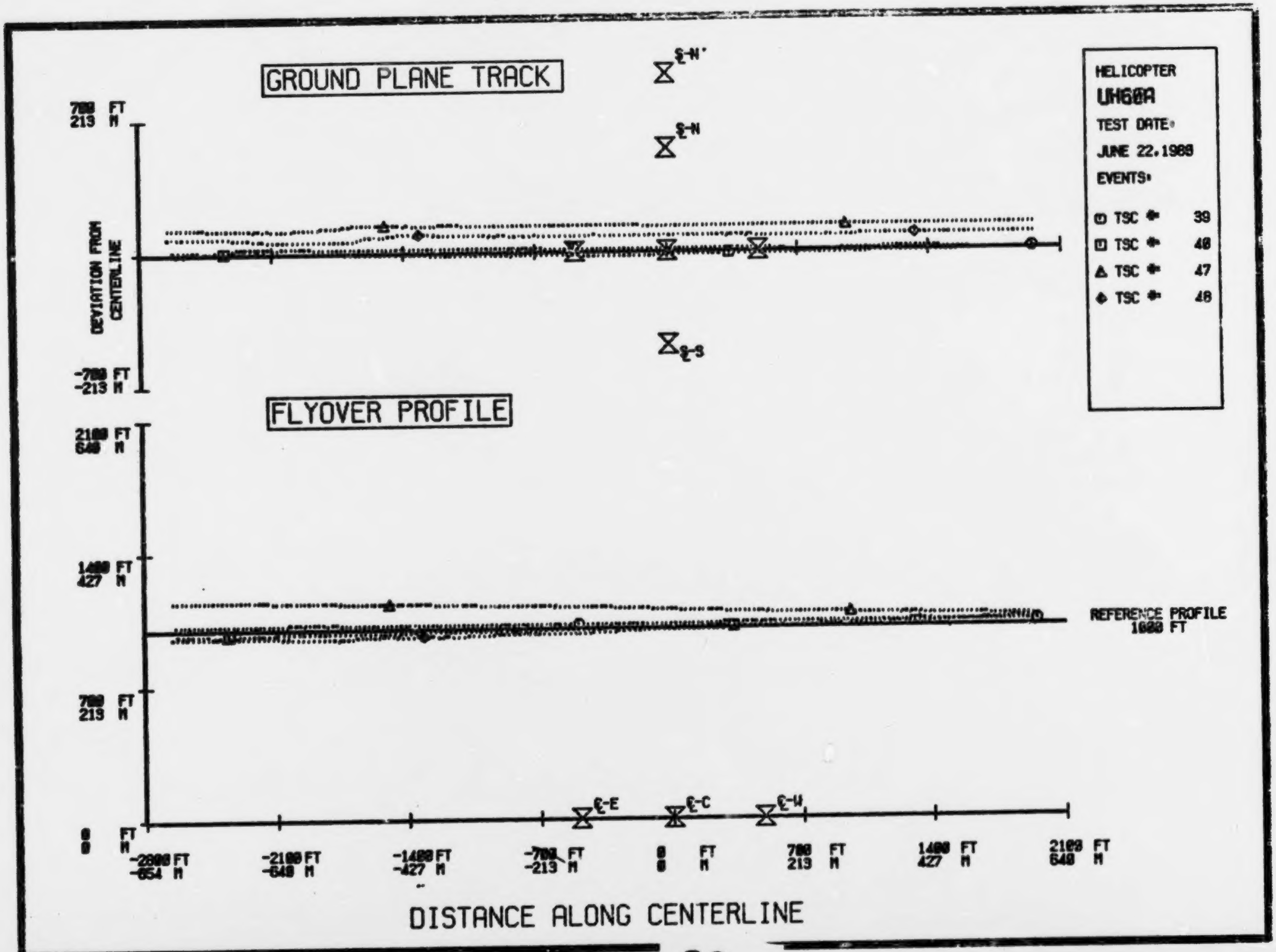

GROUND PLANE TRACK
FLYOVER PROFILE
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE 1000 FT
HELICOPTER
UH60A
TEST DATE:
JUNE 22,1988
EVENTS:
○ TSC # 39
□ TSC # 40
△ TSC # 47
◆ TSC # 48

FIGURE C1-3

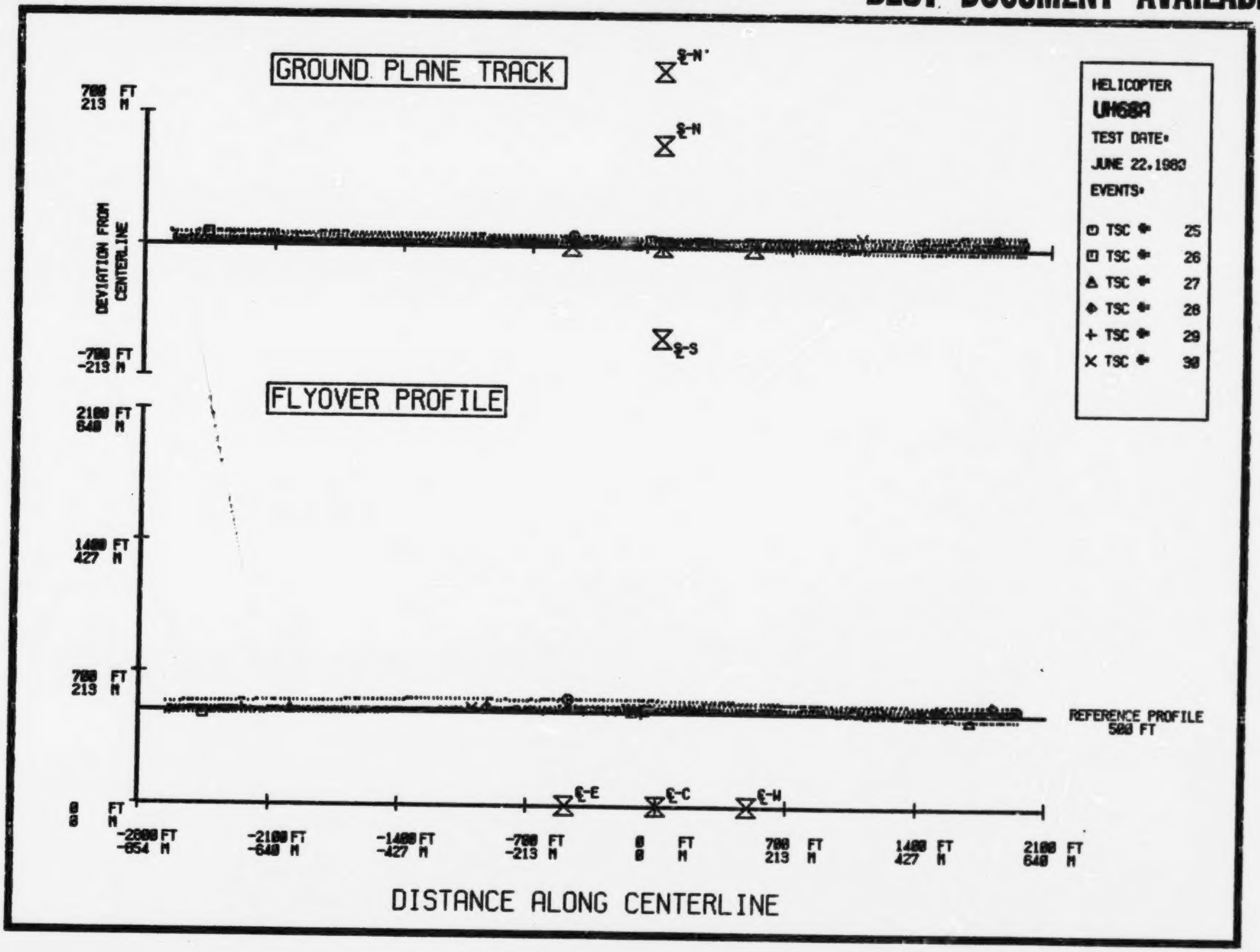

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT 213 M
DEVIATION FROM CENTERLINE
-700 FT -213 M
HELICOPTER
UH60A
TEST DATE:
JUNE 22, 1983
EVENTS:
○ TSC #: 25
□ TSC #: 26
△ TSC #: 27
◆ TSC #: 28
+ TSC #: 29
× TSC #: 30
FLYOVER PROFILE
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
REFERENCE PROFILE 500 FT
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE

FIGURE C1-4

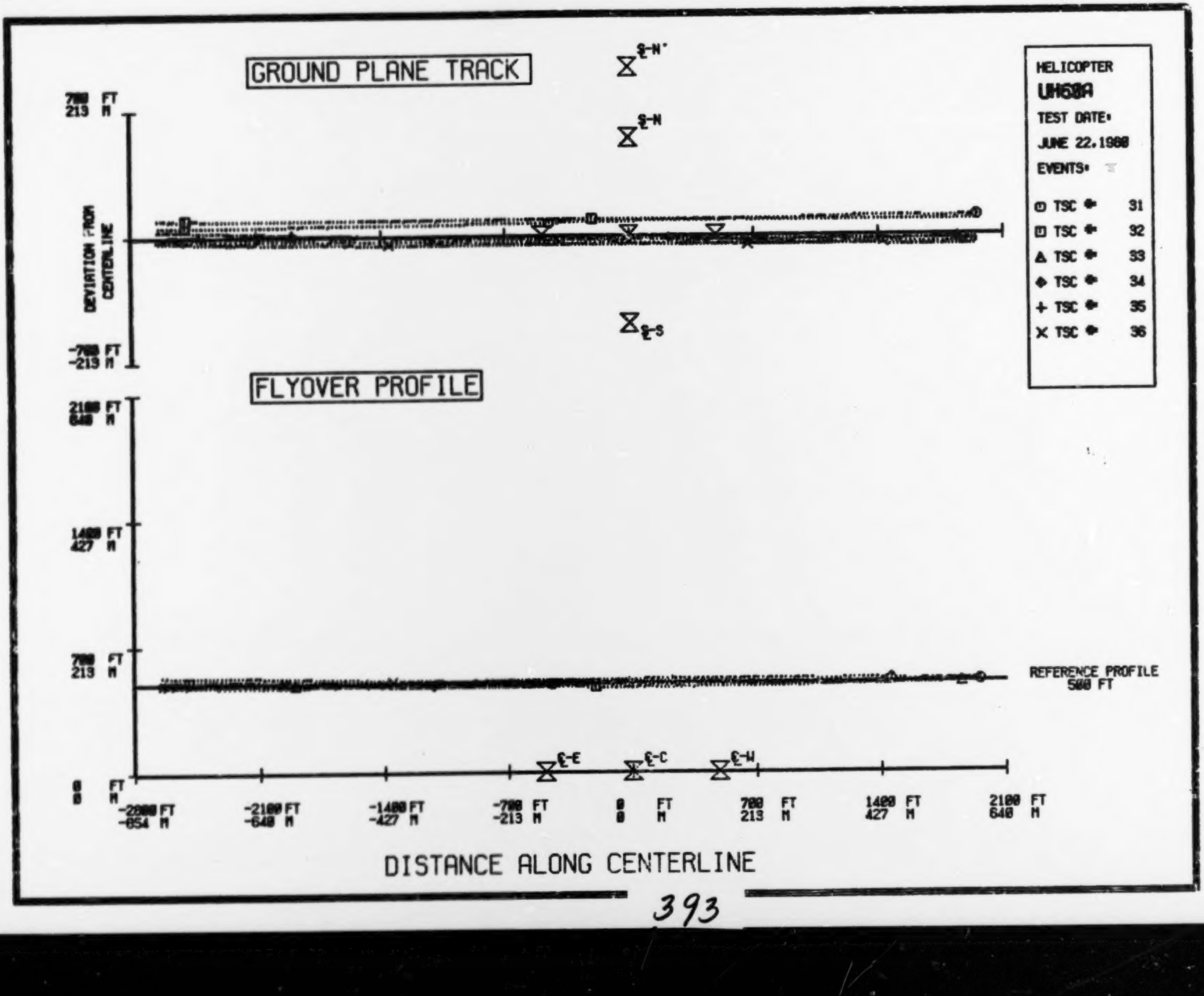

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 22, 1980
EVENTS:
TSC # 31
TSC # 32
TSC # 33
TSC # 34
TSC # 35
TSC # 36
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
500 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C1-5

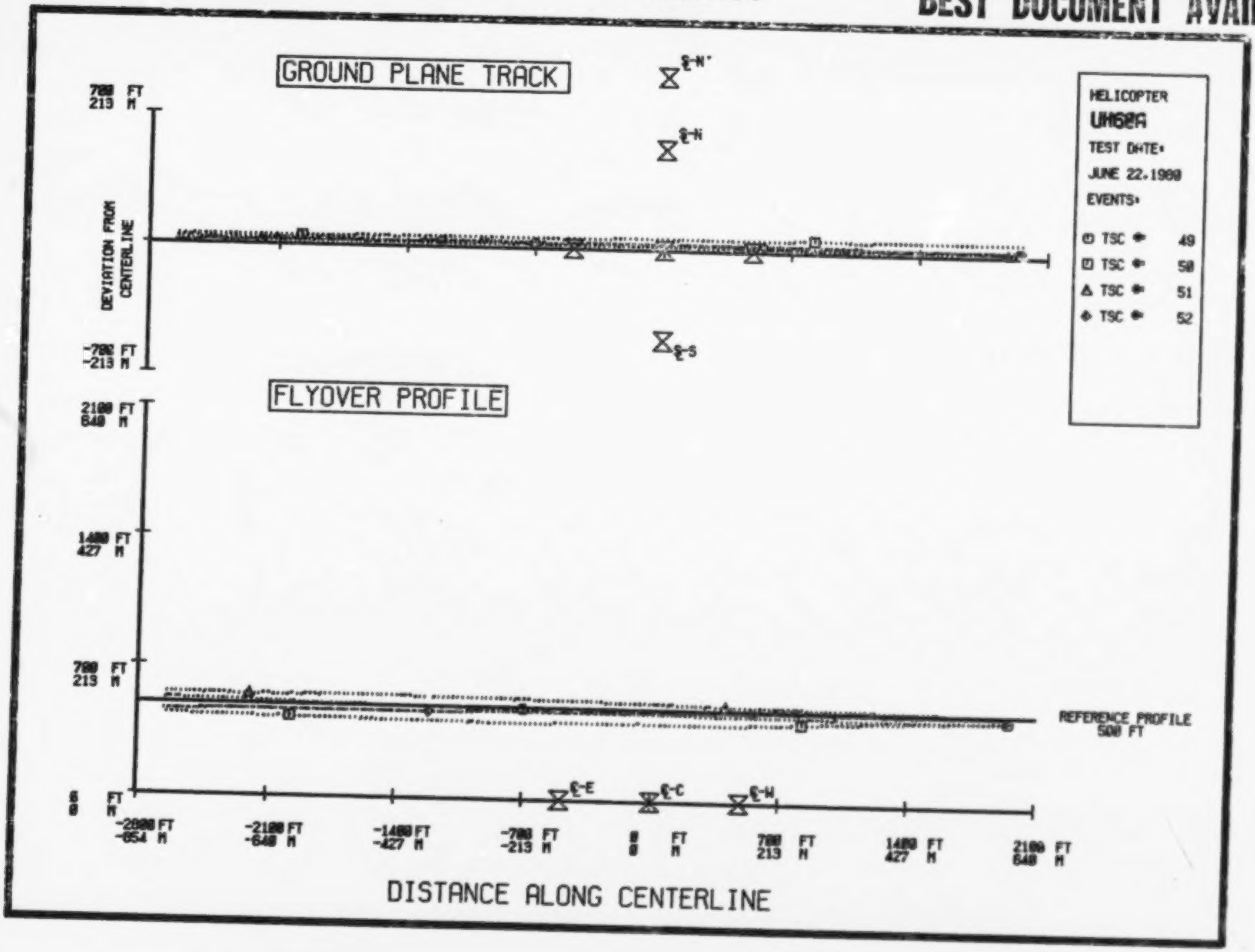
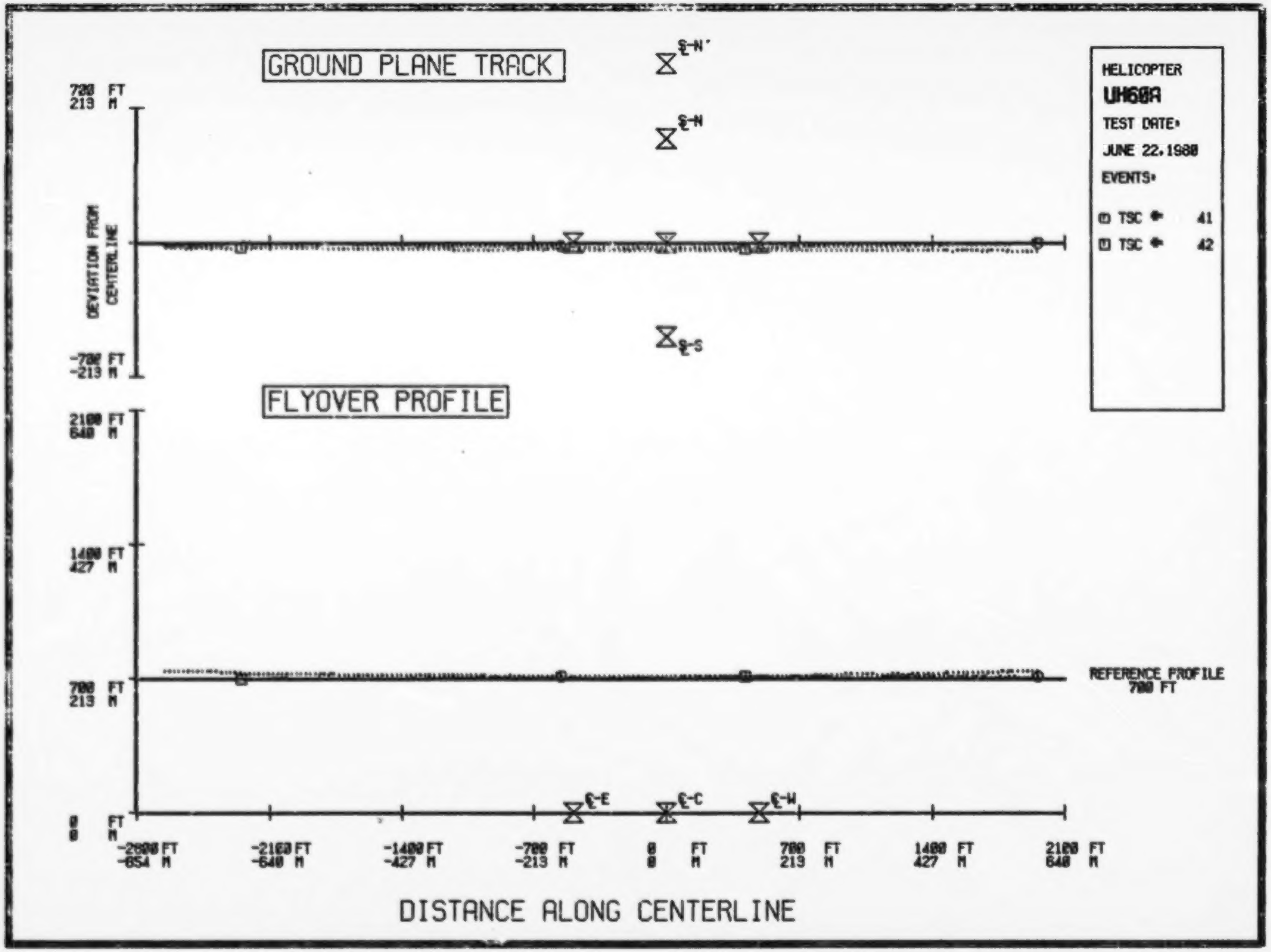

GROUND PLANE TRACK
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
℄-N'
℄-N
℄-S
HELICOPTER
UH60A
TEST DATE:
JUNE 22,1980
EVENTS:
TSC # 49
TSC # 50
TSC # 51
TSC # 52
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
500 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C1-6



BEST DOCUMENT AVAILABLE

FIGURE C1-7

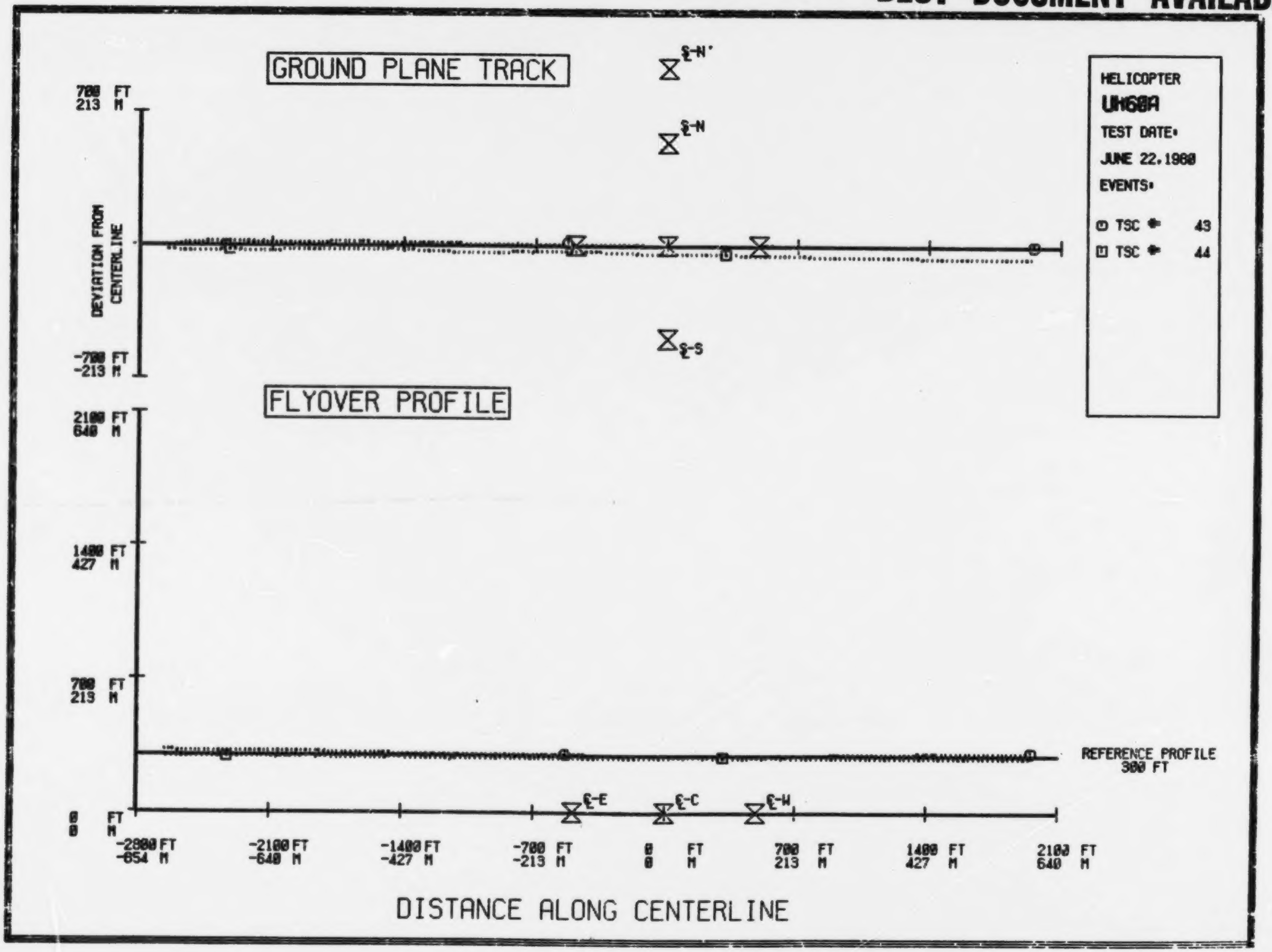
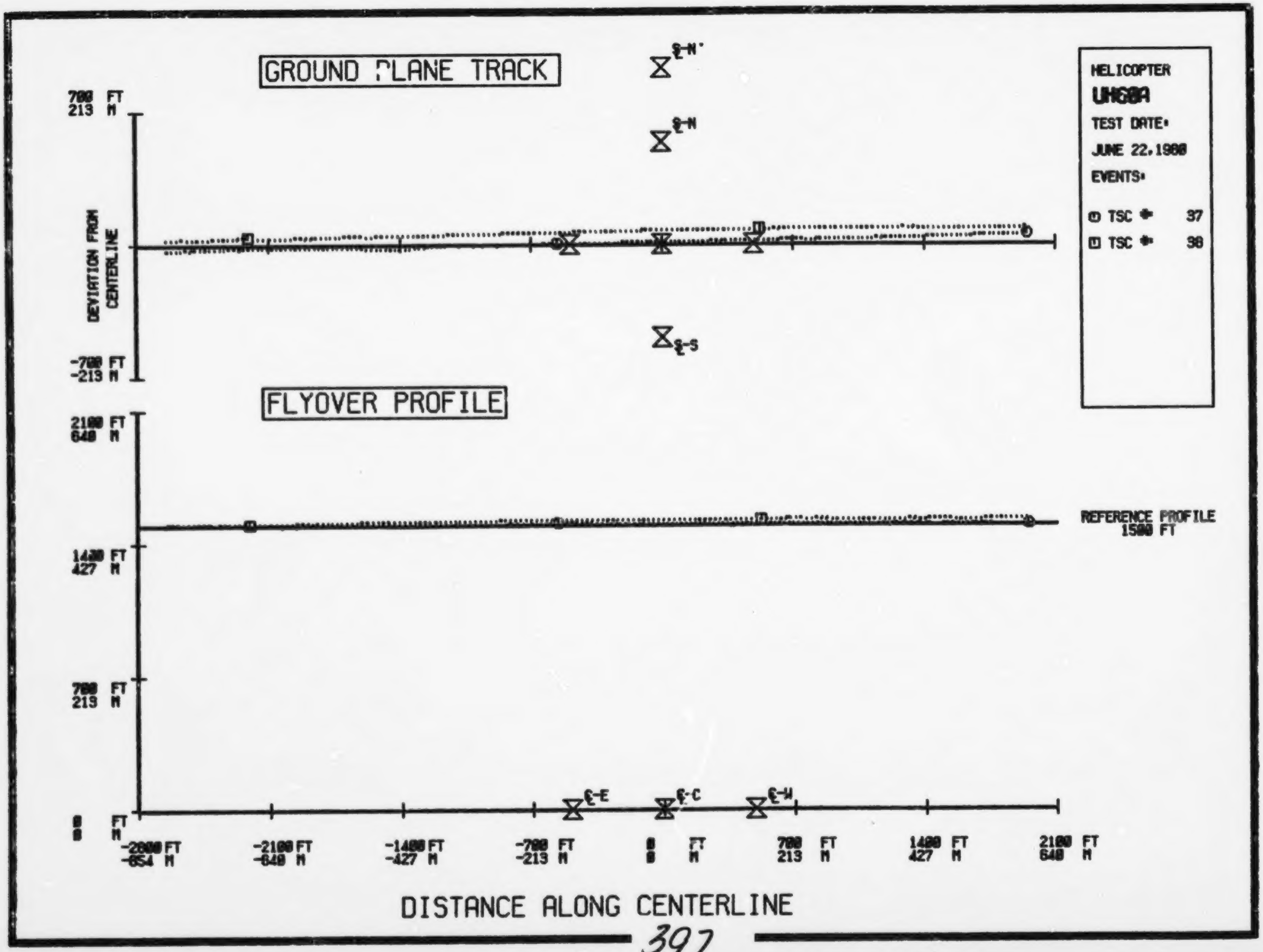

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
300 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 22, 1980
EVENTS:
⊙ TSC # 43
⊡ TSC # 44

FIGURE C1-8


GROUND PLANE TRACK
FLYOVER PROFILE
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 219 M
0 FT 0 M
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE 1500 FT
HELICOPTER
UH60A
TEST DATE:
JUNE 22, 1980
EVENTS:
○ TSC # 37
□ TSC # 38

IGURE C1-9

BEST DOCUMENT AVAILABLE

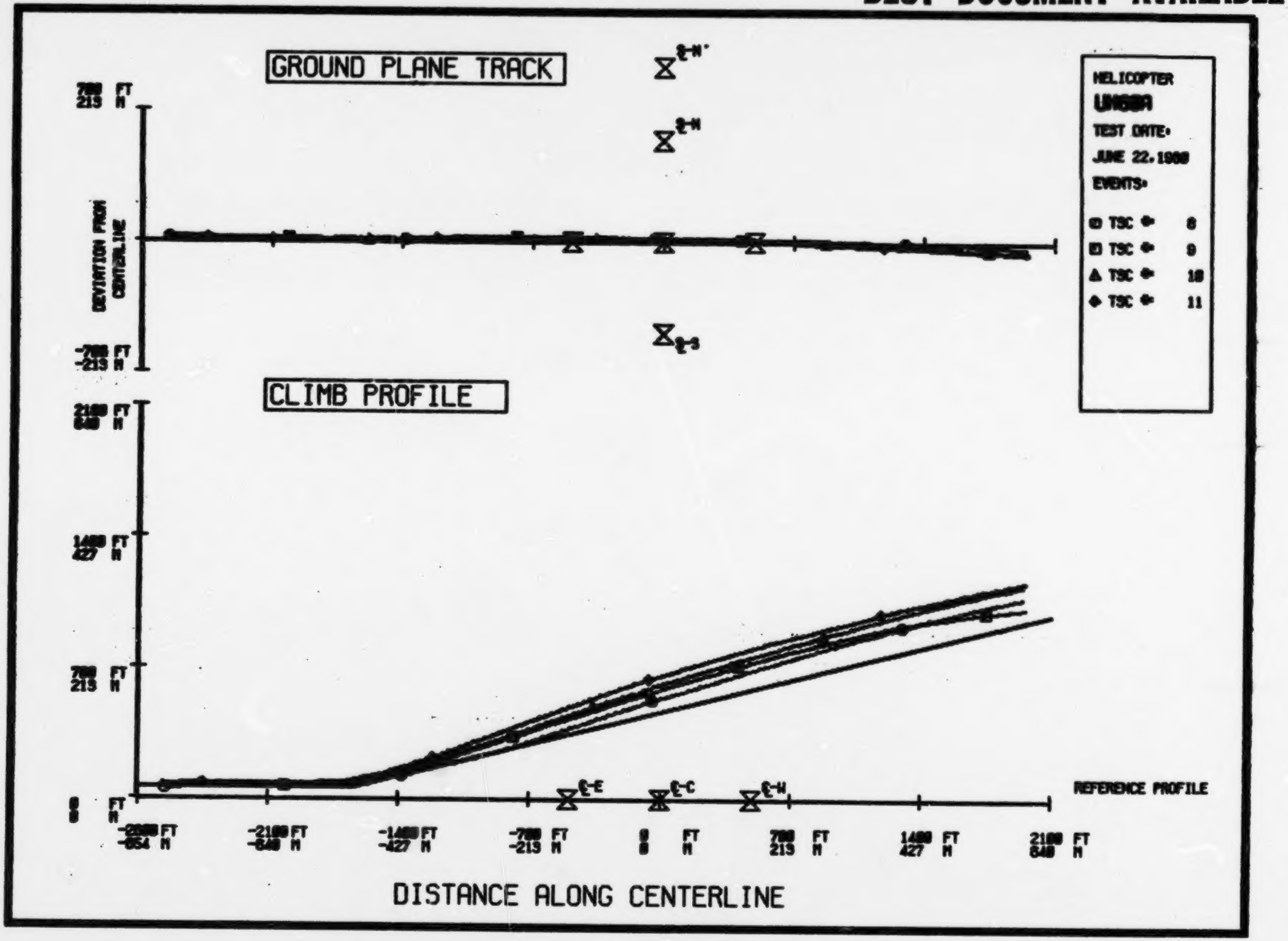
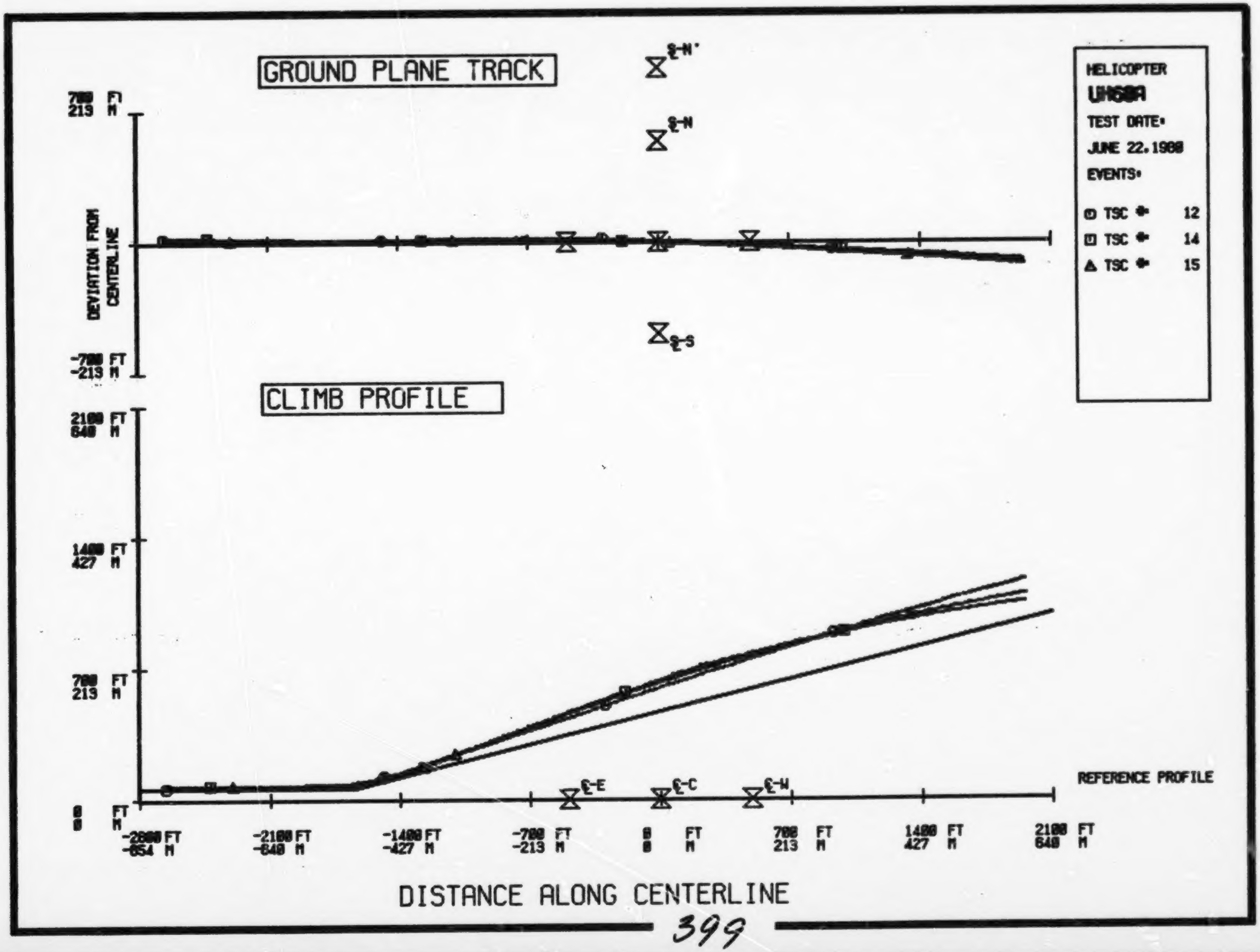


FIGURE C1-10



GROUND PLANE TRACK
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
℄-N'
℄-N
℄-S
CLIMB PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
℄-E
℄-C
℄-W
REFERENCE PROFILE
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 22, 1980
EVENTS:
○ TSC # 12
□ TSC # 14
△ TSC # 15

FIGURE C1-11

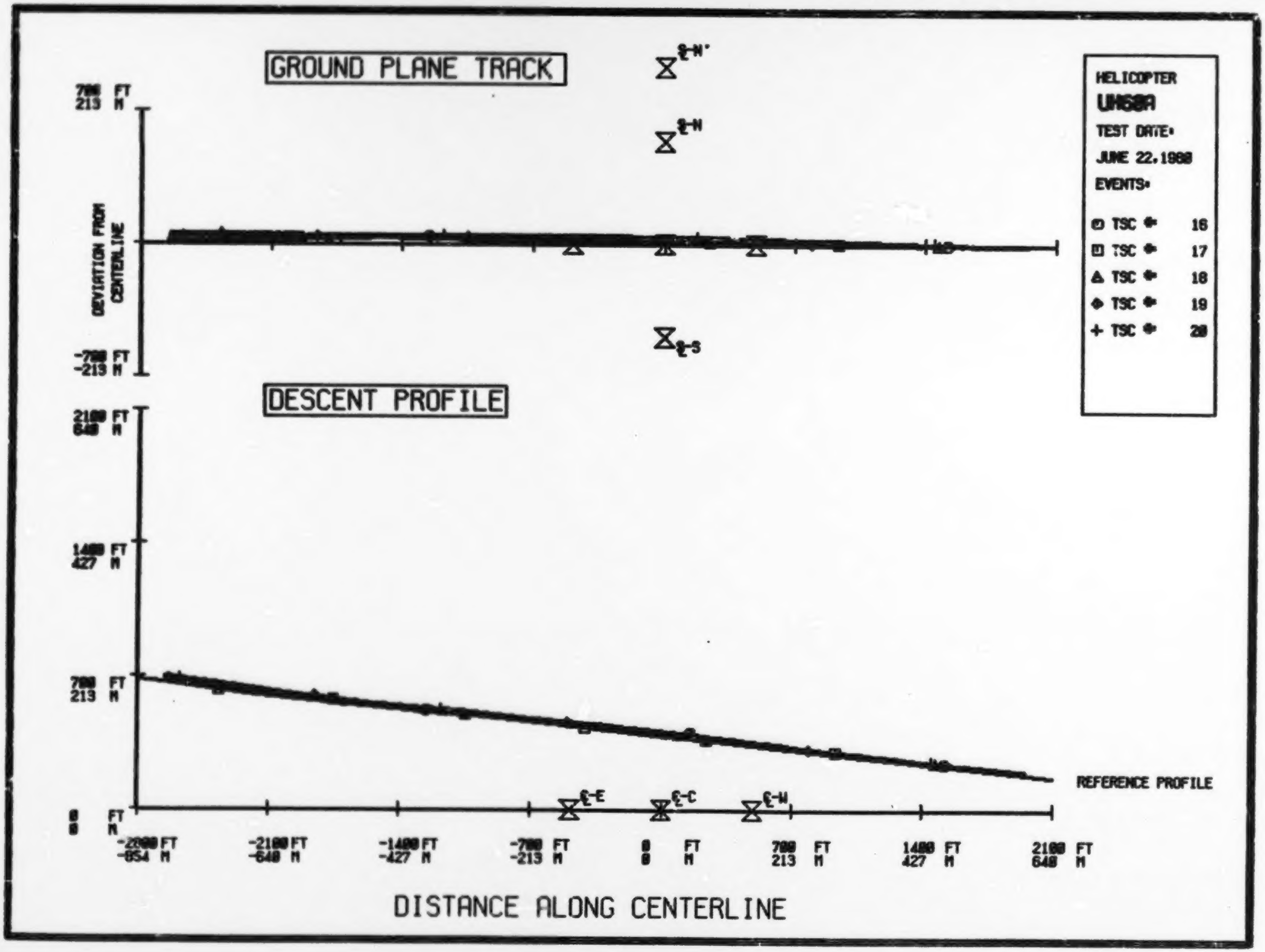

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
DESCENT PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 22, 1980
EVENTS:
⊘ TSC #: 16
⊡ TSC #: 17
△ TSC #: 18
◈ TSC #: 19
+ TSC #: 20

FIGURE C1-12

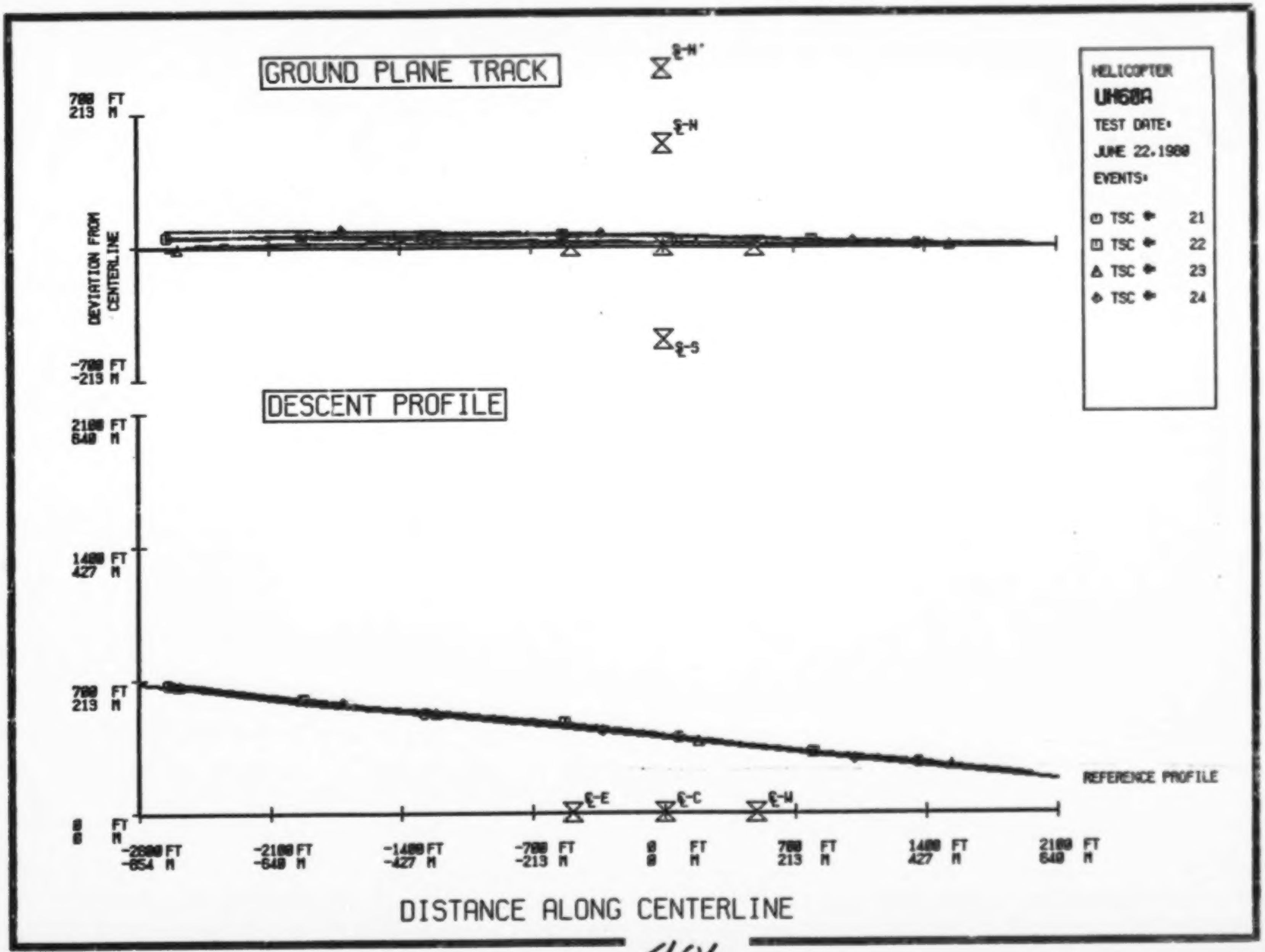

GROUND PLANE TRACK
DESCENT PROFILE
700 FT 213 M
-700 FT -213 M
DEVIATION FROM CENTERLINE
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE
DISTANCE ALONG CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 22,1980
EVENTS:
TSC # 21
TSC # 22
TSC # 23
TSC # 24

TABLE C1-1

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980 FAA/AEE 120
UH60A JAN 29,1981
MIC # 1 CENTERLINE CENTER, 4 FT

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-W	5:52:53.5	5:52:52.2	116.7	0.4	160.0	997.6	1493.5	138.1
2 F-E	5:56:20.5	5:56:18.7	198.2	0.7	152.4	1050.2	1998.2	148.3
3 F-W	5:59:10.5	5:59: 9.4	431.5	1.6	156.1	998.2	1242.7	126.6
4 F-E	6: 2:23.0	6: 2:21.3	47.9	0.2	150.1	1006.3	1881.3	147.7
5 F-W	6: 5:41.0	6: 5:39.8	170.7	0.6	160.2	1006.8	1297.8	129.1
8 DEP	6:18: 4.0	6:18: 3.5	2401.5	16.9	78.2	511.4	557.0	66.7
9 DEP	6:22: 2.0	6:22: 1.5	2286.2	17.7	70.6	558.0	560.4	95.3
10 DEP	6:25:58.5	6:25:58.0	2388.2	18.4	71.0	578.0	585.8	99.3
11 DEP	6:31: 3.5	6:31: 2.9	2352.8	18.8	68.3	623.9	628.7	97.1
12 DEP	6:35:51.0	6:35:50.5	2369.0	18.1	71.7	565.7	569.6	96.7
14 DEP	6:44:24.5	6:44:24.0	2256.7	19.1	64.4	598.4	613.6	102.8
15 DEP	6:47:60.0	6:47:59.5	2320.7	18.3	69.4	590.6	595.8	97.6
16 ARR	6:54: 3.5	6:54: 3.1	-893.0	-6.1	82.9	409.7	437.7	110.6
17 ARR	6:58:48.0	6:58:47.6	-824.5	-5.8	80.2	381.1	408.0	110.9
18 ARR	7: 3:15.5	7: 3:15.1	-843.5	-6.3	75.6	389.6	425.3	113.7
19 ARR	7: 7:45.0	7: 7:44.6	-844.5	-6.2	76.3	404.5	423.5	107.2
20 ARR	7:12: 2.0	7:12: 1.6	-817.7	-5.8	79.0	407.6	427.8	107.7
21 ARR	7:16:18.0	7:16:17.6	-885.7	-6.3	78.7	393.7	423.3	111.6
22 ARR	7:20:28.5	7:20:28.1	-932.5	-6.6	79.6	404.1	421.8	106.6

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C1-1 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
23 ARR	8: 9:27.0	8: 9:26.6	-940.0	-6.4	82.6	388.6	432.0	115.9
24 ARR	8:14:26.0	8:14:25.6	-836.3	-5.8	80.6	395.5	417.2	108.5
25 F-E	8:17:59.5	8:17:58.5	378.3	1.5	144.0	560.2	1130.7	150.3
26 F-W	8:21:35.5	8:21:34.7	163.3	0.7	141.1	505.7	936.1	147.3
27 F-E	8:24: 5.0	8:24: 4.5	24.2	0.1	108.8	497.9	525.4	108.6
28 F-W	8:26:38.5	8:26:38.0	280.7	1.0	164.1	534.0	592.4	115.6
29 F-E	8:29:18.0	8:29:17.4	-137.2	-0.6	128.6	492.9	692.4	134.6
30 F-W	8:31:48.5	8:31:48.0	51.7	0.2	122.9	517.8	580.4	116.9
31 F-E	8:35:17.5	8:35:16.8	11.8	0.0	142.0	486.8	788.9	141.9
32 F-W	8:38:25.0	8:38:24.6	-59.3	-0.2	136.7	475.1	505.6	110.0
33 F-E	8:41:52.5	8:41:51.8	128.7	0.7	110.5	488.1	844.7	144.7
34 F-W	8:45:13.5	8:45:12.8	433.3	1.6	152.6	509.7	848.2	143.1
35 F-E	8:48:34.0	8:48:33.5	72.8	0.3	126.8	495.0	612.1	126.0
36 F-W	8:52:13.0	8:52:12.4	-7.2	-0.0	119.1	507.7	704.7	133.9
37 F-E	9: 1:25.5	9: 1:22.6	17.5	0.1	148.2	1498.8	3315.2	153.1
38 F-W	9: 4:60.0	9: 4:57.6	239.5	0.8	160.7	1523.8	2663.6	145.1
40 F-W	9:11:41.5	9:11:40.2	175.8	0.6	160.0	997.3	1520.1	139.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-1 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 F-E	9:15:16.0	9:15:15.2	71.3	0.3	149.0	707.5	936.9	131.0
42 F-W	9:19:34.0	9:19:33.2	109.2	0.4	158.0	705.5	922.2	130.1
43 F-E	9:23: 8.5	9:23: 8.1	-2.8	-0.0	147.4	293.5	446.8	138.9
44 F-W	9:26:40.0	9:26:39.7	5.8	0.0	156.9	296.8	382.0	131.3
47 F-E	9:43:57.5	9:43:55.7	281.3	1.1	147.3	1098.9	2058.2	147.7
48 F-W	9:47:33.0	9:47:31.9	380.8	1.4	156.6	991.5	1194.5	123.9
49 F-E	9:51:32.0	9:51:31.4	203.0	0.7	156.2	471.1	675.1	135.7
50 F-W	9:54:22.5	9:54:22.0	77.2	0.3	166.0	422.0	587.2	134.1
51 F-E	9:57:35.0	9:57:34.2	294.7	1.1	155.6	525.6	904.1	144.5
52 F-W	10: 0:30.5	10: 0:30.1	120.5	0.7	104.4	477.3	510.2	110.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-2

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
JAN 29,1981

****

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1	F-W	5:52:55.0	5:52:53.6	313.0	1.1	158.7	1008.6	1571.4	140.1
2	F-E	5:56:19.0	5:56:17.3	295.8	1.1	153.3	1044.3	1885.1	146.4
3	F-W	5:59:12.0	5:59:10.8	378.2	1.4	157.2	1008.4	1322.6	130.3
4	F-E	6: 2:26.5	6: 2:25.6	-124.5	-0.5	150.7	1009.3	1009.5	91.2
5	F-W	6: 5:41.5	6: 5:40.1	214.2	0.8	160.9	1013.5	1609.0	141.0
8	DEP	6:18: 5.0	6:18: 4.4	2410.2	16.8	79.0	654.2	666.7	101.1
9	DEP	6:22: 5.5	6:22: 4.9	2156.3	16.2	73.3	699.1	707.2	98.7
10	DEP	6:26: 2.5	6:26: 1.8	2222.3	16.8	72.9	726.8	732.5	97.2
11	DEP	6:31: 7.0	6:31: 6.3	2156.0	16.8	70.6	770.8	785.9	101.3
12	DEP	6:35:54.5	6:35:53.9	2317.7	17.6	72.1	712.8	720.8	98.5
14	DEP	6:44:29.0	6:44:28.3	1979.5	16.2	67.4	749.3	760.3	99.7
15	DEP	6:48: 4.1	6:48: 3.1	2092.8	15.0	72.7	700.4	740.8	90.3
16	ARR	6:54: 7.0	6:54: 6.7	-975.8	-6.8	81.3	354.7	386.7	113.5
17	ARR	6:58:51.5	6:58:51.2	-673.2	-4.8	79.6	342.0	372.2	113.2
18	ARR	7: 3:19.5	7: 3:19.2	-818.2	-6.2	74.4	337.3	363.4	111.9
19	ARR	7: 7:49.0	7: 7:48.7	-949.5	-7.0	75.8	347.4	360.6	105.5
20	ARR	7:12: 5.5	7:12: 5.2	-833.5	-6.1	76.9	355.5	388.2	113.7
21	ARR	7:16:22.0	7:16:21.7	-817.5	-6.0	77.2	338.8	355.3	107.5
22	ARR	7:20:32.0	7:20:31.7	-892.3	-6.4	78.0	346.5	369.3	110.8

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C1-2 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980 FAA/AEE 120
UH60A JAN 29,1981
MIC # 2 CENTERLINE WEST, 4 FT

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
23 ARR	8: 9:30.5	8: 9:30.2	-743.3	-5.1	81.5	343.3	384.5	116.8
24 ARR	8:14:29.5	8:14:29.2	-902.0	-6.4	79.7	337.3	366.3	112.9
25 F-E	8:17:58.0	8:17:57.1	341.7	1.3	144.1	549.9	991.1	146.3
26 F-W	8:21:39.0	8:21:38.4	203.7	0.8	141.1	513.6	636.7	126.2
27 F-E	8:23:60.0	8:23:59.3	328.0	1.7	108.0	497.4	793.3	141.2
28 F-W	8:26:39.5	8:26:38.8	209.5	0.7	162.3	540.8	745.9	133.5
29 F-E	8:29:17.0	8:29:16.5	-105.5	-0.5	128.8	499.2	530.4	109.7
30 F-W	8:31:50.0	8:31:49.4	-6.7	-0.0	123.4	519.7	694.1	131.5
31 F-E	8:35:14.5	8:35:13.6	-202.5	-0.8	143.4	484.8	1032.7	152.0
32 F-W	8:38:25.5	8:38:24.8	-18.2	-0.1	136.4	476.8	768.9	141.7
33 F-E	8:41:50.0	8:41:49.3	63.3	0.3	110.8	489.2	817.6	143.3
34 F-W	8:45:15.5	8:45:14.8	250.0	0.9	152.3	512.1	837.3	142.3
35 F-E	8:48:31.5	8:48:30.9	39.5	0.2	127.5	494.8	639.8	129.3
36 F-W	8:52:17.0	8:52:16.5	-216.3	-1.0	120.9	499.9	521.5	106.5
37 F-E	9: 1:28.0	9: 1:26.1	47.8	0.2	148.2	1499.3	2183.4	136.6
38 F-W	9: 5: 0.5	9: 4:57.8	238.8	0.8	160.5	1520.5	3042.2	150.0
39 F-E	9: 8:30.5	9: 8:29.6	-133.2	-0.5	145.3	1021.0	1031.8	98.3
40 F-W	9:11:46.5	9:11:45.6	-19.2	-0.1	160.0	999.5	1018.2	101.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-2 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 F-E	9:15:13.0	9:15:12.0	20.3	0.1	148.2	707.4	1162.0	142.5
42 F-W	9:19:37.5	9:19:36.9	222.8	0.8	157.2	707.7	718.2	99.8
43 F-E	9:23: 7.5	9:23: 7.2	-108.7	-0.4	147.0	295.5	301.9	101.8
44 F-W	9:26:42.5	9:26:42.2	-53.3	-0.2	156.2	289.7	295.8	101.7
47 F-E	9:44: 1.5	9:44: 0.5	420.0	1.6	146.5	1084.8	1085.6	92.1
48 F-W	9:47:36.0	9:47:35.1	343.3	1.2	156.6	1002.1	1056.7	108.5
49 F-E	9:51:31.5	9:51:31.1	184.8	0.7	156.5	464.6	471.2	99.6
50 F-W	9:54:25.0	9:54:24.6	274.2	0.9	165.7	421.0	452.3	111.5
51 F-E	9:57:30.5	9:57:29.0	273.3	1.0	156.9	514.2	1702.1	162.4
52 F-W	10: 0:33.5	10: 0:33.1	97.0	0.5	104.6	484.4	504.6	106.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-3

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-W	5:52:51.5	5:52:50.1	-155.2	-0.5	160.5	987.4	1540.3	140.1
2 F-E	5:56:24.0	5:56:22.6	109.0	0.4	152.9	1053.6	1600.1	138.8
3 F-W	5:59: 5.5	5:59: 3.7	333.5	1.2	156.7	985.3	2014.5	150.7
4 F-E	6: 2:30.0	6: 2:29.1	-220.8	-0.8	151.6	997.7	1006.2	97.4
5 F-W	6: 5:38.0	6: 5:36.6	139.2	0.5	159.9	1001.9	1566.6	140.2
8 DEP	6:17:60.0	6:17:59.7	2674.8	18.7	77.9	353.3	391.3	64.5
9 DEP	6:21:58.0	6:21:57.6	2342.5	18.2	70.3	406.1	409.4	97.3
10 DEP	6:25:55.5	6:25:55.1	2499.7	19.1	71.2	418.1	418.6	87.2
11 DEP	6:30:59.0	6:30:58.6	2569.3	20.3	68.7	456.7	477.0	106.8
12 DEP	6:35:48.0	6:35:47.6	2312.0	17.9	70.9	412.0	414.3	83.9
14 DEP	6:44:20.5	6:44:20.1	2369.8	20.1	64.0	432.6	445.3	103.7
15 DEP	6:47:56.0	6:47:55.6	2467.5	19.5	68.7	428.7	434.6	99.4
16 ARR	6:53:59.0	6:53:58.5	-626.2	-4.2	84.3	458.6	543.3	122.4
17 ARR	6:58:44.0	6:58:43.6	-955.2	-6.7	79.8	436.8	488.0	116.5
18 ARR	7: 3:12.0	7: 3:11.6	-701.2	-5.2	76.5	443.0	461.7	106.4
19 ARR	7: 7:41.5	7: 7:41.1	-678.3	-4.9	78.9	455.6	463.6	100.7
20 ARR	7:11:58.0	7:11:57.6	-846.0	-6.0	79.6	453.0	494.5	112.2
21 ARR	7:16:15.0	7:16:14.6	-892.0	-6.3	79.4	450.3	457.6	100.2
22 ARR	7:20:24.5	7:20:24.1	-861.2	-6.0	81.2	461.7	495.3	111.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C1-3 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
JAN 29,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
23 ARR	8: 9:24.0	8: 9:23.6	-859.0	-5.7	85.7	446.8	462.8	105.1
24 ARR	8:14:21.0	8:14:20.5	-813.7	-5.6	82.1	443.1	566.6	128.6
25 F-E	8:18: 4.5	8:18: 4.0	31.3	0.1	143.2	561.8	586.1	106.6
26 F-W	8:21:34.5	8:21:33.9	152.0	0.6	142.1	499.4	692.5	133.9
27 F-E	8:24: 7.5	8:24: 7.0	41.2	0.2	109.5	499.9	539.6	112.1
28 F-W	8:26:36.0	8:26:35.4	351.7	1.2	162.0	524.7	709.1	132.3
29 F-E	8:29:20.0	8:29:19.3	-135.3	-0.6	128.6	489.1	737.6	138.5
30 F-W	8:31:45.0	8:31:44.4	179.2	0.8	122.9	516.8	724.3	134.5
31 F-E	8:35:19.0	8:35:18.2	122.8	0.5	141.5	491.5	930.2	147.7
32 F-W	8:38:21.5	8:38:20.9	-310.8	-1.3	136.1	480.1	725.5	138.6
33 F-E	8:41:58.0	8:41:57.6	-231.2	-1.2	111.6	475.1	487.9	103.1
34 F-W	8:45:11.0	8:45:10.1	212.7	0.8	154.5	493.1	1008.0	150.7
35 F-E	8:48:37.0	8:48:36.5	14.0	0.1	125.7	496.6	534.1	111.6
36 F-W	8:52:10.0	8:52: 9.3	129.5	0.6	119.6	506.6	793.6	140.3
37 F-E	9: 1:28.5	9: 1:25.8	61.3	0.2	148.4	1503.8	3031.9	150.3
38 F-W	9: 4:55.5	9: 4:52.4	30.7	0.1	164.2	1521.7	3493.2	154.2
39 F-E	9: 8:28.5	9: 8:26.6	-98.5	-0.4	144.5	1015.1	2108.9	151.2
40 F-W	9:11:39.5	9:11:38.1	144.2	0.5	158.8	991.5	1555.0	140.4

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-3 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 F-E	9:15:20.0	9:15:19.4	83.7	0.3	148.9	709.7	711.9	94.5
42 F-W	9:19:30.0	9:19:28.7	62.5	0.2	158.4	700.8	1478.7	151.7
43 F-E	9:23: 6.5	9:23: 5.1	-144.5	-0.6	147.3	299.8	1611.3	169.3
44 F-W	9:26:36.5	9:26:35.8	-19.7	-0.1	155.4	284.4	841.6	160.2
47 F-E	9:43:60.0	9:43:58.3	316.5	1.2	146.7	1116.5	1930.0	144.7
48 F-W	9:47:28.0	9:47:26.3	69.2	0.3	154.9	971.4	1938.9	149.9
49 F-E	9:51:34.0	9:51:33.4	219.3	0.8	155.9	479.8	645.1	131.9
50 F-W	9:54:20.5	9:54:19.9	27.8	0.1	166.0	415.5	651.1	140.3
51 F-E	9:57:37.0	9:57:36.2	325.0	1.2	154.7	534.5	377.7	142.5
52 F-W	10: 0:26.0	10: 0:25.4	90.7	0.5	104.8	472.2	700.7	137.6

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-4

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980 FAA/AEE 120
UH60A JAN 29,1981
MIC # 4 SIDELINE NORTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-W	5:52:53.0	5:52:51.5	48.8	0.2	160.2	1090.8	1697.0	140.0
2 F-E	5:56:26.0	5:56:25.0	136.5	0.5	152.5	1085.7	1088.6	94.2
3 F-W	5:59:12.5	5:59:11.5	352.2	1.3	156.3	1116.4	1130.3	99.0
4 F-E	6: 2:28.5	6: 2:27.6	-196.7	-0.7	150.9	1053.0	1053.0	90.4
5 F-W	6: 5:38.0	6: 5:36.1	139.2	0.5	159.9	1052.1	2105.3	150.0
8 DEP	6:18: 1.5	6:18: 0.9	2566.3	18.0	77.9	695.3	707.1	100.5
9 DEP	6:22: 1.0	6:22: 0.3	2290.3	17.8	70.5	729.1	751.9	104.1
10 DEP	6:26: 1.0	6:26: 0.3	2277.3	17.4	71.5	746.9	775.0	74.5
11 DEP	6:31: 4.0	6:31: 3.3	2299.0	18.3	68.6	783.0	783.1	90.2
12 DEP	6:35:53.5	6:35:52.8	2303.7	17.4	72.5	741.1	778.2	72.2
14 DEP	6:44:26.0	6:44:25.3	2232.5	18.6	65.5	770.8	771.0	88.9
15 DEP	6:47:59.0	6:47:58.3	2380.8	18.7	69.3	766.8	793.2	104.8
17 ARR	6:58:46.5	6:58:45.9	-931.5	-6.6	80.0	606.7	717.9	122.3
18 ARR	7: 3:15.5	7: 3:14.9	-843.5	-6.3	75.6	620.7	646.1	106.1
19 ARR	7: 7:44.5	7: 7:43.9	-841.2	-6.2	76.7	632.2	667.7	108.8
20 ARR	7:12: 1.5	7:12: 0.9	-820.7	-5.9	78.8	605.6	643.9	109.9
21 ARR	7:16:17.5	7:16:16.9	-896.3	-6.4	78.9	614.7	661.5	111.7
22 ARR	7:20:28.0	7:20:27.4	-956.8	-6.8	79.7	596.4	630.0	108.8

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-4 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC $ 4 SIDELINE NORTH, 4 FT

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
23 ARR	8: 9:26.5	8: 9:25.9	-971.7	-6.6	82.4	648.9	712.8	114.4
24 ARR	8:14:26.0	8:14:25.5	-836.3	-5.8	80.6	583.8	601.6	104.0
25 F-E	8:18: 2.5	8:18: 1.8	156.5	0.6	143.1	713.6	736.3	104.3
26 F-W	8:21:38.5	8:21:37.9	218.8	0.9	141.0	682.7	682.7	90.3
27 F-E	8:24: 4.5	8:24: 3.8	30.8	0.2	108.9	689.3	748.3	112.9
28 F-W	8:26:39.0	8:26:38.4	252.2	0.9	163.3	701.7	717.7	102.1
29 F-E	8:29:20.0	8:29:19.4	-135.3	-0.6	128.6	700.0	703.0	95.2
30 F-W	8:31:44.5	8:31:43.2	151.5	0.7	122.8	689.1	1420.0	151.0
31 F-E	8:35:19.0	8:35:18.4	122.8	0.5	141.5	634.1	672.8	109.5
32 F-W	8:38:25.5	8:38:25.0	-18.2	-0.1	136.4	616.6	620.3	96.3
33 F-E	8:41:56.0	8:41:55.4	-244.3	-1.3	110.1	708.8	709.8	93.0
34 F-W	8:45:15.5	8:45:14.8	250.0	0.9	152.3	735.5	748.5	100.7
35 F-E	8:48:35.5	8:48:34.9	38.8	0.2	126.7	706.0	708.6	95.0
36 F-W	8:52:15.5	8:52:14.8	-150.5	-0.7	119.6	740.7	740.9	91.1
37 F-E	9: 1:28.0	9: 1:25.6	47.8	0.2	148.2	1574.1	2691.6	144.2
38 F-W	9: 5: 0.5	9: 4:58.2	238.8	0.8	160.5	1572.5	2567.0	142.1
39 F-E	9: 8:33.0	9: 8:32.0	-66.2	-0.3	144.5	1123.5	1124.7	92.7
40 F-W	9:11:36.5	9:11:33.8	85.5	0.3	160.8	1120.3	3090.9	158.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-4 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980 FAA/AEE 120
UH60A JAN 29,1981
MIC $ 4 SIDELINE NORTH, 4 FT

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 F-E	9:15:15.0	9:15:13.9	14.5	0.1	148.8	901.6	1300.6	136.1
42 F-W	9:19:36.0	9:19:35.2	85.7	0.3	157.9	881.2	883.1	93.8
43 F-E	9:23: 9.0	9:23: 8.5	41.3	0.2	147.1	571.8	625.1	113.8
44 F-W	9:26:40.5	9:26:40.0	42.2	0.2	157.4	604.7	625.6	104.8

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-5

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 5 SIDELINE SOUTH, 4 FT

FAA/AEE 120
JAN 29,1981

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1	F-W	5:52:56.5	5:52:55.5	359.2	1.3	158.1	1151.0	1171.5	100.7
2	F-E	5:56:22.0	5:56:20.4	171.2	0.6	152.9	1229.2	1759.8	135.7
3	F-W	5:59:12.5	5:59:11.5	352.2	1.3	156.3	1109.0	1125.2	99.7
4	F-E	6: 2:24.0	6: 2:22.4	-38.7	-0.1	150.0	1183.2	1768.7	138.0
5	F-W	6: 5:43.5	6: 5:42.4	165.5	0.6	159.8	1185.2	1190.9	95.6
8	DEP	6:17:59.5	6:17:58.8	2684.7	18.8	77.8	723.6	837.0	120.2
9	DEP	6:21:60.0	6:21:59.3	2321.3	17.9	70.9	758.3	824.7	113.2
10	DEP	6:25:55.5	6:25:54.7	2499.7	19.1	71.2	771.2	922.6	123.3
11	DEP	6:31: 1.0	6:31: 0.2	2480.7	19.8	68.0	805.8	901.9	116.7
12	DEP	6:35:48.5	6:35:47.7	2352.3	18.1	70.9	758.0	870.4	119.4
14	DEP	6:44:23.0	6:44:22.3	2316.3	19.7	63.7	778.5	847.0	113.2
15	DEP	6:47:57.5	6:47:56.7	2468.0	19.5	68.9	770.2	875.2	118.4
16	ARR	6:54: 4.5	6:54: 3.9	-880.7	-6.0	82.6	654.5	655.7	93.5
17	APR	6:58:48.5	6:58:47.9	-809.2	-5.7	80.1	637.6	647.6	100.1
18	ARR	7: 3:16.5	7: 3:15.9	-847.8	-6.3	75.4	634.2	640.4	98.0
19	ARR	7: 7:46.0	7: 7:45.4	-853.2	-6.3	76.2	641.6	641.7	91.0
20	ARR	7:12: 1.0	7:12: 0.3	-826.0	-5.9	78.4	670.4	736.8	114.5
21	APR	7:16:19.0	7:16:18.1	-864.8	-6.2	75.6	645.1	646.5	93.8
22	ARR	7:20:29.5	7:20:28.9	-948.7	-6.7	79.4	674.5	674.8	91.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-5 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 5 SIDELINE SOUTH, 4 FT

FAA/AEE 120
JAN 29,1981

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
23 ARR	8: 9:28.0	8: 9:27.4	-894.0	-6.1	82.1	641.7	646.2	96.8
24 ARR	8:14:27.0	8:14:26.4	-904.8	-6.4	79.9	675.3	676.8	93.0
25 F-E	8:18: 3.0	8:18: 2.3	98.5	0.4	143.3	776.3	778.7	94.5
26 F-W	8:21:38.0	8:21:37.3	214.8	0.9	140.6	707.6	743.6	101.9
27 F-E	8:24: 5.5	8:24: 4.9	7.8	0.0	108.1	710.4	720.7	99.7
28 F-W	8:26:38.5	8:26:37.8	280.7	1.0	164.1	749.7	811.3	118.5
29 F-E	8:29:19.0	8:29:18.3	-162.5	-0.7	128.8	692.7	746.5	111.9
30 F-W	8:31:49.0	8:31:48.3	31.8	0.1	120.7	738.7	763.6	104.7
31 F-E	8:35:18.5	8:35:17.8	84.0	0.3	141.6	745.1	847.0	118.4
32 F-W	8:38:25.0	8:38:24.3	-59.3	-0.2	136.7	745.2	778.9	106.9
33 F-E	8:41:55.0	8:41:54.4	-166.2	-0.9	110.3	676.7	707.2	106.9
34 F-W	8:45:13.5	8:45:12.6	433.3	1.6	152.6	690.3	984.9	136.3
35 F-E	8:48:35.0	8:48:34.4	21.8	0.1	128.2	689.8	707.4	102.8
36 F-W	8:52:14.5	8:52:13.9	-82.7	-0.4	120.0	671.5	697.7	105.7
37 F-E	9: 1:30.5	9: 1:28.6	52.3	0.2	148.5	1580.8	2147.3	132.6
38 F-W	9: 4:57.0	9: 4:53.8	161.2	0.3	164.0	1623.7	3638.6	153.5
39 F-E	9: 8:29.5	9: 8:28.2	-133.2	-0.5	144.5	1135.0	1500.7	130.9
40 F-W	9:11:40.5	9:11:38.9	254.2	0.9	159.3	1103.7	1860.9	143.6

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-5 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 5 SIDELINE SOUTH, 4 FT

FAA/AEE 120
JAN 29,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 F-E	9:15:17.5	9:15:16.7	32.7	0.1	150.5	850.2	878.6	104.6
42 F-W	9:19:36.0	9:19:35.3	85.7	0.3	157.9	838.6	840.0	93.4
43 F-E	9:23:10.0	9:23: 9.5	103.2	0.4	146.8	574.1	574.1	89.6
44 F-W	9:26:39.5	9:26:38.9	59.8	0.2	156.1	532.0	721.8	132.5
47 F-E	9:44: 1.0	9:43:59.7	365.2	1.4	146.1	1257.6	1454.4	120.2
48 F-W	9:47:28.5	9:47:26.4	90.2	0.3	155.2	1142.8	2426.8	151.9
49 F-E	9:51:33.5	9:51:32.9	239.0	0.9	156.3	695.4	700.4	96.9
50 F-W	9:54:23.0	9:54:22.3	107.2	0.4	165.6	692.8	756.3	113.7
51 F-E	9:57:37.5	9:57:36.9	330.3	1.2	154.6	732.9	734.3	93.5
52 F-W	10: 0:30.5	10: 0:29.8	120.5	0.7	104.4	710.2	742.2	106.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-6

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980 FAA/AEE 120
UH60A JAN 29,1981
MIC # 6 SIDELINE NORTH, 4 FT

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1	F-W	5:52:57.0	5:52:55.8	362.0	1.3	158.2	1302.5	1306.5	94.5
2	F-E	5:56:19.0	5:56:16.7	295.8	1.1	153.3	1286.3	2570.0	150.0
3	F-W	5:59:12.0	5:59:10.7	378.2	1.4	157.2	1370.5	1419.2	105.1
4	F-E	6: 2:27.0	6: 2:25.8	-128.0	-0.5	151.0	1266.3	1345.7	109.8
5	F-W	6: 5:44.0	6: 5:42.9	183.0	0.6	159.9	1264.4	1264.4	89.6
8	DEP	6:18: 5.5	6:18: 4.5	2424.7	16.9	78.9	1044.0	1106.3	70.7
9	DEP	6:22: 2.5	6:22: 1.6	2251.5	17.4	71.1	1065.9	1066.5	91.8
10	DEP	6:25:58.5	6:25:57.5	2388.2	18.4	71.0	1079.8	1089.4	97.6
11	DEP	6:31: 3.0	6:31: 2.0	2391.5	19.2	67.6	1105.3	1119.4	99.1
12	DEP	6:35:51.5	6:35:50.5	2323.3	17.7	71.7	1078.0	1078.5	91.8
14	DEP	6:44:25.0	6:44:24.0	2245.2	18.9	64.7	1101.5	1107.4	95.9
15	DEP	6:47:59.5	6:47:58.5	2340.2	18.4	69.3	1099.7	1112.0	98.5
16	ARR	6:54: 3.5	6:54: 2.6	-898.0	-6.1	82.9	959.9	1020.1	101.4
17	ARR	6:58:45.5	6:58:44.5	-952.7	-6.7	80.6	987.8	1141.6	120.1
18	ARR	7: 3:14.5	7: 3:13.6	-834.7	-6.2	75.8	1001.1	1060.4	109.2
19	ARR	7: 7:43.5	7: 7:42.5	-806.5	-5.9	77.1	1009.4	1081.6	111.0
20	ARR	7:12: 0.5	7:11:59.6	-823.3	-5.9	78.7	976.9	1055.2	112.2
21	ARR	7:16:16.5	7:16:15.6	-944.2	-6.7	79.5	992.7	1078.1	113.0
22	ARR	7:20:26.5	7:20:25.6	-928.7	-6.5	80.2	967.4	1070.0	115.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-6 (CONT)

POSITION DATA
HELICOPTER NOISE MEASUREMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC # 6 SIDELINE NORTH, 4 FT

FAA/AEE 120
JAN 29,1981

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
23 ARR	8: 9:26.0	8: 9:25.1	-989.8	-6.8	81.8	991.2	1072.4	112.4
24 ARR	8:14:24.0	8:14:23.1	-795.0	-5.5	81.0	956.0	1063.9	116.0
25 F-E	8:18: 1.0	8:17:59.9	311.0	1.2	143.2	1045.1	1232.9	122.0
26 F-W	8:21:38.0	8:21:37.1	214.2	0.9	140.6	1030.7	1050.5	101.2
27 F-E	8:24: 5.5	8:24: 4.6	7.8	0.0	108.1	1042.3	1053.0	98.2
28 F-W	8:26:38.5	8:26:37.5	280.7	1.0	164.1	1042.0	1113.9	110.7
29 F-E	8:29:16.5	8:29:15.2	-84.2	-0.4	128.4	1057.9	1434.9	132.5
30 F-W	8:31:50.0	8:31:49.1	-6.7	-0.0	123.4	1033.5	1034.0	91.9
31 F-E	8:35:17.0	8:35:15.9	17.5	0.1	142.7	978.6	1287.8	130.5
32 F-W	8:38:26.0	8:38:25.2	62.8	0.3	136.5	962.6	962.6	90.6
33 F-E	8:41:56.5	8:41:55.6	-267.0	-1.4	110.5	1070.9	1071.1	91.0
34 F-W	8:45:15.5	8:45:14.5	250.0	0.9	152.3	1095.7	1118.5	101.6
35 F-E	8:48:36.0	8:48:35.1	38.5	0.2	126.7	1064.5	1064.8	91.3
36 F-W	8:52:15.0	8:52:14.0	-108.8	-0.5	119.4	1103.0	1113.2	97.7
37 F-E	9: 1:28.0	9: 1:25.5	47.8	0.2	148.2	1758.6	2817.5	141.4
38 F-W	9: 5: 2.0	9: 4:59.9	124.7	0.4	161.7	1747.0	2359.7	132.2
39 F-E	9: 8:22.5	9: 8:19.5	133.7	0.5	143.9	1370.9	3383.3	156.1
40 F-W	9:11:45.0	9:11:43.8	102.2	0.4	159.7	1376.9	1387.6	97.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-6 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980 FAA/AEE 120
UH60A JAN 29,1981
MIC # 6 SIDELINE NORTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 F-E	9:15:17.0	9:15:15.9	56.7	0.2	149.7	1185.3	1264.6	110.4
42 F-W	9:19:36.0	9:19:34.9	85.7	0.3	157.9	1197.4	1203.6	95.8
43 F-E	9:23: 9.0	9:23: 8.1	41.3	0.2	147.1	974.9	1034.2	109.5
44 F-W	9:26:42.0	9:26:41.1	19.8	0.1	156.4	1013.5	1021.7	82.8
47 F-E	9:43:59.5	9:43:57.9	303.7	1.2	146.9	1350.8	1797.6	131.3
48 F-W	9:47:35.5	9:47:34.4	400.5	1.4	156.2	1302.7	1303.0	91.4
49 F-E	9:51:31.5	9:51:30.4	184.8	0.7	156.5	1025.4	1277.9	126.6
50 F-W	9:54:23.0	9:54:22.1	107.2	0.4	165.6	965.0	1043.8	112.4
51 F-E	9:57:35.5	9:57:34.4	315.2	1.1	155.3	1052.2	1256.2	123.1
52 F-W	10: 0:30.5	10: 0:29.6	120.5	0.7	104.4	1014.1	1050.3	105.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-7

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC #1G CENTERLINE CENTER, GROUND

FAA/AEE 120
JAN 29,1981

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1	F-W	5:52:53.5	5:52:52.2	116.7	0.4	160.0	1001.6	1498.1	138.0
2	F-E	5:56:26.0	5:56:25.1	136.5	0.5	152.5	1054.1	1056.2	93.6
3	F-W	5:59:10.0	5:59: 8.8	429.0	1.6	156.1	1002.2	1342.9	131.7
4	F-E	6: 2:28.0	6: 2:27.1	-176.0	-0.7	150.6	1010.3	1019.6	97.8
5	F-W	6: 5:40.5	6: 5:39.3	149.2	0.5	160.5	1010.8	1407.4	134.1
8	DEP	6:18: 4.0	6:18: 3.5	2401.5	16.9	78.2	515.2	561.0	66.7
9	DEP	6:22: 3.0	6:22: 2.5	2229.7	17.1	71.5	561.8	564.6	84.3
10	DEP	6:25:59.5	6:25:59.0	2359.2	18.1	71.1	581.8	582.5	87.3
11	DEP	6:31: 2.5	6:31: 1.9	2443.3	19.6	67.9	627.6	655.2	106.2
12	DEP	6:35:50.5	6:35:50.0	2379.8	18.1	71.8	569.6	583.5	102.6
14	DEP	6:44:24.0	6:44:23.4	2275.5	19.1	64.7	602.2	632.4	107.8
15	DEP	6:47:59.0	6:47:58.5	2380.8	18.7	69.3	594.3	625.5	108.2
16	ARR	6:54: 5.0	6:54: 4.6	-903.3	-6.2	82.2	413.7	412.4	81.4
17	ARR	6:58:47.5	6:58:47.1	-843.7	-5.9	80.2	385.1	443.8	119.8
18	ARR	7: 3:16.5	7: 3:16.2	-847.8	-6.3	75.4	393.5	396.7	97.3
19	ARR	7: 7:45.0	7: 7:44.6	-844.5	-6.2	76.3	408.5	427.8	107.3
20	ARR	7:12: 2.0	7:12: 1.6	-817.7	-5.8	79.0	411.6	431.7	107.6
21	ARR	7:16:18.0	7:16:17.6	-885.7	-6.3	78.7	397.7	427.6	111.6
22	ARR	7:20:28.5	7:20:28.1	-932.5	-6.6	79.6	408.1	426.1	106.7

REC. TIME: TIME PNLTM WAS RECORDED, RAD. TIME: TIME PNLTM WAS RADIATED
R/C: AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG: CLIMB OR DESCENT ANGLE
GS: GROUND SPEED, CPA: CLOSEST POINT OF APPROACH
SR: SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG: ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C1-7 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC #1G CENTERLINE CENTER, GROUND

FAA/AEE 120
JAN 29,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
23 ARR	8: 9:27.0	8: 9:26.6	-940.0	-6.4	82.6	392.5	436.4	115.9
24 ARR	8:14:25.5	8:14:25.1	-805.2	-5.6	80.9	399.5	448.8	117.1
25 F-E	8:18: 1.5	8:18: 0.9	280.5	1.1	143.1	564.2	694.6	125.7
26 F-W	8:21:36.0	8:21:35.3	158.7	0.6	141.0	509.7	818.7	141.5
27 F-E	8:24: 5.0	8:24: 4.5	24.2	0.1	108.8	501.9	529.8	108.7
28 F-W	8:26:38.0	8:26:37.4	326.7	1.1	163.5	538.0	683.8	128.1
29 F-E	8:29:18.0	8:29:17.4	-137.2	-0.6	128.6	496.9	695.3	134.4
30 F-W	8:31:49.0	8:31:48.5	31.8	0.1	122.7	521.8	543.9	106.4
31 F-E	8:35:17.5	8:35:16.8	11.8	0.0	142.0	490.7	791.3	141.7
32 F-W	8:38:24.0	8:38:23.4	-175.0	-0.7	136.3	479.0	646.9	132.2
33 F-E	8:41:55.0	8:41:54.5	-166.2	-0.9	110.3	492.1	524.1	110.1
34 F-W	8:45:13.5	8:45:12.8	433.3	1.6	152.6	513.7	850.5	142.8
35 F-E	8:48:33.5	8:48:32.9	73.7	0.3	126.6	499.0	693.2	134.0
36 F-W	8:52:14.5	8:52:14.0	-82.7	-0.4	120.0	511.7	535.4	107.1
37 F-E	9: 1:25.5	9: 1:22.6	17.5	0.1	148.2	1502.8	3317.0	153.1
38 F-W	9: 5: 0.5	9: 4:58.3	238.8	0.8	160.5	1527.8	2520.2	142.7
39 F-E	9: 8:28.0	9: 8:26.5	-84.2	-0.3	144.8	1020.4	1731.7	143.9
40 F-W	9:11:40.5	9:11:38.9	254.2	0.9	159.3	1001.3	1786.0	145.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-7 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC $1G CENTERLINE CENTER, GROUND

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 F-E	9:15:16.5	9:15:15.7	65.7	0.2	149.0	711.5	855.2	123.7
42 F-W	9:19:34.0	9:19:33.2	109.2	0.4	158.0	709.5	925.2	129.9
43 F-E	9:23: 8.5	9:23: 8.1	-2.8	-0.0	147.4	297.5	449.5	138.6
44 F-W	9:26:39.5	9:26:39.1	59.8	0.2	156.1	290.8	513.0	145.5
47 F-E	9:43:58.5	9:43:56.9	253.2	1.0	146.8	1102.9	1810.9	142.5
48 F-W	9:47:32.5	9:47:31.4	449.8	1.6	156.7	995.5	1291.6	129.6
49 F-E	9:51:37.5	9:51:36.6	247.5	0.9	155.5	475.1	1013.5	28.0
50 F-W	9:54:22.5	9:54:22.0	77.2	0.3	166.0	426.0	592.0	134.0
51 F-E	9:57:36.0	9:57:35.4	319.2	1.2	155.1	529.6	674.5	128.3
52 F-W	10: 0:30.5	10: 0:30.1	120.5	0.7	104.4	481.3	514.0	110.5

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-8

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
JAN 29,1981

****

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1	F-W	5:52:52.5	5:52:51.0	-17.0	-0.1	160.2	968.7	1740.7	146.2
2	F-E	5:56:23.0	5:56:21.8	110.7	0.4	152.4	1021.6	1375.7	132.0
3	F-W	5:59:10.5	5:59: 9.4	431.5	1.6	156.1	969.2	1217.0	127.2
4	F-E	6: 2:28.5	6: 2:27.6	-186.7	-0.7	150.9	977.6	977.7	90.6
5	F-W	6: 5:41.0	6: 5:39.9	170.7	0.6	160.2	978.2	1272.4	129.8
8	DEP	6:18: 2.5	6:18: 2.1	2506.3	17.5	78.3	483.9	484.3	87.5
9	DEP	6:22: 2.0	6:22: 1.5	2286.2	17.7	70.6	529.9	533.5	96.6
10	DEP	6:25:58.5	6:25:58.0	2388.2	18.4	71.0	550.3	559.5	100.4
11	DEP	6:31: 2.5	6:31: 1.9	2443.3	19.6	67.9	596.9	628.8	108.3
12	DEP	6:35:50.5	6:35:50.0	2379.8	18.1	71.8	537.7	554.7	104.2
14	DEP	6:44:24.5	6:44:24.0	2256.7	19.1	64.4	570.9	588.7	104.1
15	DEP	6:47:59.5	6:47:59.0	2340.2	18.4	69.3	563.1	580.6	104.1
16	ARR	6:54: 5.5	6:54: 5.2	-916.3	-6.3	81.7	380.9	404.4	70.4
17	ARR	6:58:48.0	6:58:47.7	-824.5	-5.8	80.2	352.2	378.5	111.5
18	ARR	7: 3:16.5	7: 3:16.2	-847.8	-6.3	75.4	360.8	363.2	96.6
19	ARR	7: 7:45.0	7: 7:44.7	-844.5	-6.2	76.3	375.7	394.3	107.7
20	ARR	7:12: 2.0	7:12: 1.7	-817.7	-5.9	79.0	378.9	398.4	108.0
21	ARR	7:16:18.0	7:16:17.7	-825.7	-6.3	78.7	364.8	394.3	112.3
22	ARR	7:20:28.5	7:20:28.2	-932.5	-6.6	79.6	375.6	392.2	106.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-8 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
23 ARR	8: 9:27.5	8: 9:27.2	-920.7	-6.3	82.5	359.7	375.8	106.8
24 ARR	8:14:26.0	8:14:25.7	-836.3	-5.8	80.6	367.0	387.9	108.9
25 F-E	8:18: 2.5	8:18: 2.0	156.5	0.6	143.1	531.3	548.2	104.3
26 F-W	8:21:36.0	8:21:35.3	158.7	0.6	141.0	476.7	793.1	143.1
27 F-E	8:24: 5.0	8:24: 4.6	24.2	0.1	108.8	468.9	496.8	109.3
28 F-W	8:26:38.0	8:26:37.4	326.7	1.1	163.5	505.1	655.3	129.6
29 F-E	8:29:17.5	8:29:16.8	-110.0	-0.5	128.7	463.9	766.1	142.7
30 F-W	8:31:48.5	8:31:48.0	51.7	0.2	122.9	488.9	552.8	117.8
31 F-E	8:35:17.5	8:35:16.8	11.8	0.0	142.0	458.2	767.7	143.4
32 F-W	8:38:24.5	8:38:24.0	-102.0	-0.4	136.8	446.7	535.2	123.4
33 F-E	8:41:53.0	8:41:52.3	86.3	0.4	110.2	459.1	738.2	141.5
34 F-W	8:45:13.5	8:45:12.8	433.3	1.6	152.6	486.8	827.6	144.5
35 F-E	8:48:34.0	8:48:33.5	72.8	0.3	126.8	466.0	586.2	127.3
36 F-W	8:52:14.5	8:52:14.1	-82.7	-0.4	120.0	478.9	502.2	107.5
37 F-E	9: 1:31.0	9: 1:29.3	41.8	0.2	143.4	1469.8	1946.4	131.0
38 F-W	9: 4:60.0	9: 4:57.7	239.5	0.8	160.7	1454.8	2642.6	145.6
39 F-E	9: 8:27.5	9: 8:25.9	-45.7	-0.2	144.7	987.4	1834.3	147.4
40 F-W	9:11:42.0	9:11:40.8	154.8	0.5	159.6	968.4	1376.7	135.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-8 (CONT).

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 F-E	9:15:16.0	9:15:15.2	71.3	0.3	149.0	678.5	912.1	131.9
42 F-W	9:19:35.5	9:19:34.9	44.5	0.2	158.5	676.5	690.9	101.7
44 F-W	9:26:39.5	9:26:39.1	59.8	0.2	156.1	258.2	492.9	148.4
47 F-E	9:43:60.0	9:43:58.7	316.5	1.2	146.7	1070.1	1453.3	132.6
48 F-W	9:47:32.5	9:47:31.4	449.8	1.6	156.7	962.6	1261.9	130.3
49 F-E	9:51:32.0	9:51:31.4	203.0	0.7	156.2	442.1	651.7	137.3
50 F-W	9:54:22.5	9:54:22.0	77.2	0.3	166.0	393.4	563.1	135.7
51 F-E	9:57:35.5	9:57:34.8	315.2	1.1	155.3	496.6	756.4	139.0
52 F-W	10: 0:30.0	10: 0:29.5	122.0	0.7	104.1	448.4	524.2	121.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-9

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC $5G SIDELINE SOUTH, GROUND

FAA/AEE 120
JAN 29,1981

****

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1	F-W	5:52:56.5	5:52:55.5	359.2	1.3	158.1	1154.5	1174.9	100.7
2	F-E	5:56:24.0	5:56:22.8	109.0	6.4	152.9	1232.5	1396.9	118.1
3	F-W	5:59:12.5	5:59:11.5	352.2	1.3	156.3	1112.6	1128.8	99.7
4	F-E	6: 2:23.5	6: 2:21.8	15.8	0.1	150.0	1186.6	1885.1	141.0
5	F-W	6: 5:43.0	6: 5:41.9	161.7	0.6	159.8	1188.5	1216.3	102.3
8	DEP	6:18: 2.0	6:18: 1.4	2522.5	17.7	78.1	726.3	729.5	95.3
9	DEP	6:21:60.0	6:21:59.3	2321.3	17.9	70.9	761.1	826.8	113.0
10	DEP	6:25:56.0	6:25:55.2	2500.0	15.2	71.0	774.0	889.7	119.5
11	DEP	6:31: 1.0	6:31: 0.2	2480.7	19.8	68.0	808.7	903.9	116.5
12	DEP	6:35:48.5	6:35:47.7	2352.3	18.1	70.9	760.9	872.3	119.3
14	DEP	6:44:23.0	6:44:22.3	2316.3	19.7	63.7	781.4	849.2	113.0
15	DEP	6:47:57.5	6:47:56.7	2468.0	19.5	68.9	773.2	877.7	118.2
16	ARR	6:54: 4.0	6:54: 3.4	-886.3	-6.0	82.9	657.0	667.4	100.1
17	ARR	6:58:48.5	6:58:47.9	-809.2	-5.7	80.1	640.0	650.0	100.1
18	ARR	7: 3:16.5	7: 3:15.9	-847.8	-6.3	75.4	636.6	643.1	98.2
19	ARR	7: 7:45.5	7: 7:44.9	-845.8	-6.3	76.2	644.1	650.1	97.8
20	ARR	7:12: 2.5	7:12: 1.9	-805.7	-5.8	73.7	672.8	679.2	97.9
21	ARR	7:16:19.0	7:16:18.4	-864.8	-6.2	78.6	647.5	649.0	93.8
22	ARR	7:20:29.0	7:20:28.4	-943.5	-6.7	79.4	676.9	683.8	98.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-9 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
23 ARR	8: 9:28.5	8: 9:27.9	-856.0	-5.9	82.0	644.1	644.0	90.0
24 ARR	8:14:27.0	8:14:26.4	-904.2	-6.4	79.9	677.6	678.5	93.0
25 F-E	8:18: 1.0	8:18: 0.1	311.0	1.2	143.2	779.1	970.1	126.6
26 F-W	8:21:38.0	8:21:37.3	214.2	0.9	140.6	730.4	746.3	101.9
27 F-E	8:24: 5.5	8:24: 4.9	7.8	0.0	108.1	713.2	723.4	99.7
28 F-W	8:26:38.0	8:26:37.2	326.7	1.1	163.5	752.5	889.6	122.2
29 F-E	8:29:19.5	8:29:18.9	-140.2	-0.6	128.5	695.5	713.8	103.0
30 F-W	8:31:49.0	8:31:48.3	31.8	0.1	122.7	741.5	766.8	104.8
31 F-E	8:35:18.5	8:35:17.8	84.0	0.3	141.6	747.7	849.2	118.3
32 F-W	8:38:25.5	8:38:24.8	-18.2	-0.1	136.4	747.7	754.9	97.9
33 F-E	8:41:55.5	8:41:54.9	-214.3	-1.1	110.1	679.6	689.2	99.6
34 F-W	8:45:13.5	8:45:12.6	433.3	1.6	152.6	683.3	986.9	136.2
35 F-E	8:48:35.0	8:48:34.4	21.2	0.1	126.2	692.7	710.6	102.5
36 F-W	8:52:15.5	8:52:14.9	-150.5	-0.7	119.6	674.5	674.6	89.1
37 F-E	9: 1:30.5	9: 1:28.6	52.3	0.2	148.5	1584.6	2151.8	132.6
38 F-W	9: 4:57.5	9: 4:54.4	164.7	0.6	161.8	1627.4	3465.0	152.0
39 F-E	9: 8:30.0	9: 8:28.7	-132.3	-0.5	144.8	1138.6	1415.4	126.4
40 F-W	9:11:42.5	9:11:41.3	238.2	0.8	159.0	1107.3	1390.6	127.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C1-9 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 22,1980
UH60A
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
JAN 29,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 F-E	9:15:17.0	9:15:16.2	56.7	0.2	149.7	853.5	926.0	112.8
42 F-W	9:19:36.0	9:19:35.3	85.7	0.3	157.9	841.9	843.4	93.3
43 F-E	9:23: 9.5	9:23: 9.0	73.0	0.3	147.1	576.1	587.0	101.0
44 F-W	9:26:39.5	9:26:38.9	59.8	0.2	156.1	534.1	723.4	132.4
47 F-E	9:44: 1.0	9:43:59.7	365.2	1.4	146.1	1261.1	1458.6	120.2
48 F-W	9:47:35.5	9:47:34.5	400.5	1.4	156.2	1146.2	1146.2	90.2
49 F-E	9:51:33.0	9:51:32.4	236.7	0.9	156.4	698.2	733.3	107.9
50 F-W	9:54:22.5	9:54:21.8	77.2	0.3	166.0	695.2	833.8	123.5
51 F-E	9:57:35.5	9:57:34.7	315.2	1.1	155.3	735.8	960.5	130.0
52 F-W	10: 0:30.5	10: 0:29.8	120.5	0.7	164.4	712.9	744.8	166.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

Sub-Appendix C2 Summary

S76 June 23, 1980

Flight Path Tracking Data and Position Data

1. FLIGHT PATH TRACKING PLOTS

Event No.	Plot Fig. No.	Operation			
5	C2-1	1500 Ft.	LFO	140 kts	Target Speed
6	"	"			"
12	"	"			"
15	C2-2	300 Ft.	LFO	140 kts	Target Speed
16	"	"		"	"
7	C2-3	700 Ft.	LFO	140 kts	Target Speed
8	"	"		"	"
13	"	"		"	"
14	"	"		"	"
17	C2-4	500 Ft.	LFO	140 kts	Target Speed
18	"	"		140 kts	"
19	"	"		140 kts	"
20	"	"		140 kts	"
21	"	"		93 kts	"
22	"	"		93 kts	"
57	C2-5	500 Ft.	LFO	140 kts	Target Speed
58	"	"		"	"
59	"	"		"	"
60	"	"		"	"
61	"	"		93 kts	"
62	"	"		93 kts	"
63	C2-6	500 Ft.	LFO	93 kts	Target Speed
64	"	"		"	"
65	"	"		155 kts	"
66	"	"		"	"
67	"	"		"	"
68	"	"		"	"

Event No.	Plot Fig. No.	Operation			
33	C2-7	Takeoff			
35	"	"			
37	"	"			
39	"	"			
41	"	"			
43	C2-8	Takeoff			
53	"	"			
55	"	"			
49	C2-9	500 Ft.	LFO	124 kts	Target Speed
50	"	"		"	"
51	"	"		"	"
52	"	"		"	"
34	C2-10	Approach			
36	"	"			
40	"	"			
42	"	"			
44	"	"			
45	C2-11	1000 Ft.	LFO	140 kts	Target Speed
46	"	"		"	"
47	"	"		"	"
48	"	"		"	"
29	C2-12	500 Ft.	LFO	109 kts	Target Speed
30	"	"		"	"
31	"	"		"	"
32	"	"		"	"

430

2. POSITION DATA TABLES

Table Number	Microphone
C2-1	Mic. 1, Centerline Center 4 ft.
C2-2	Mic. 2, Centerline 150m West 4 ft.
C2-3	Mic. 3, Centerline 150m East 4 ft.
C2-4	Mic. 4, Sideline 164m North 4 ft.
C2-5	Mic. 5, Sideline 150m South 4 ft.
C2-6	Mic. 6, Sideline 284m North 4 ft.
C2-7	Mic. 1G, Centerline Center (Ground)
C2-8	Mic. 1H, Centerline Center 33 ft.
C2-9	Mic. 5G, Sideline 150m South (Ground)

FIGURE C2-1

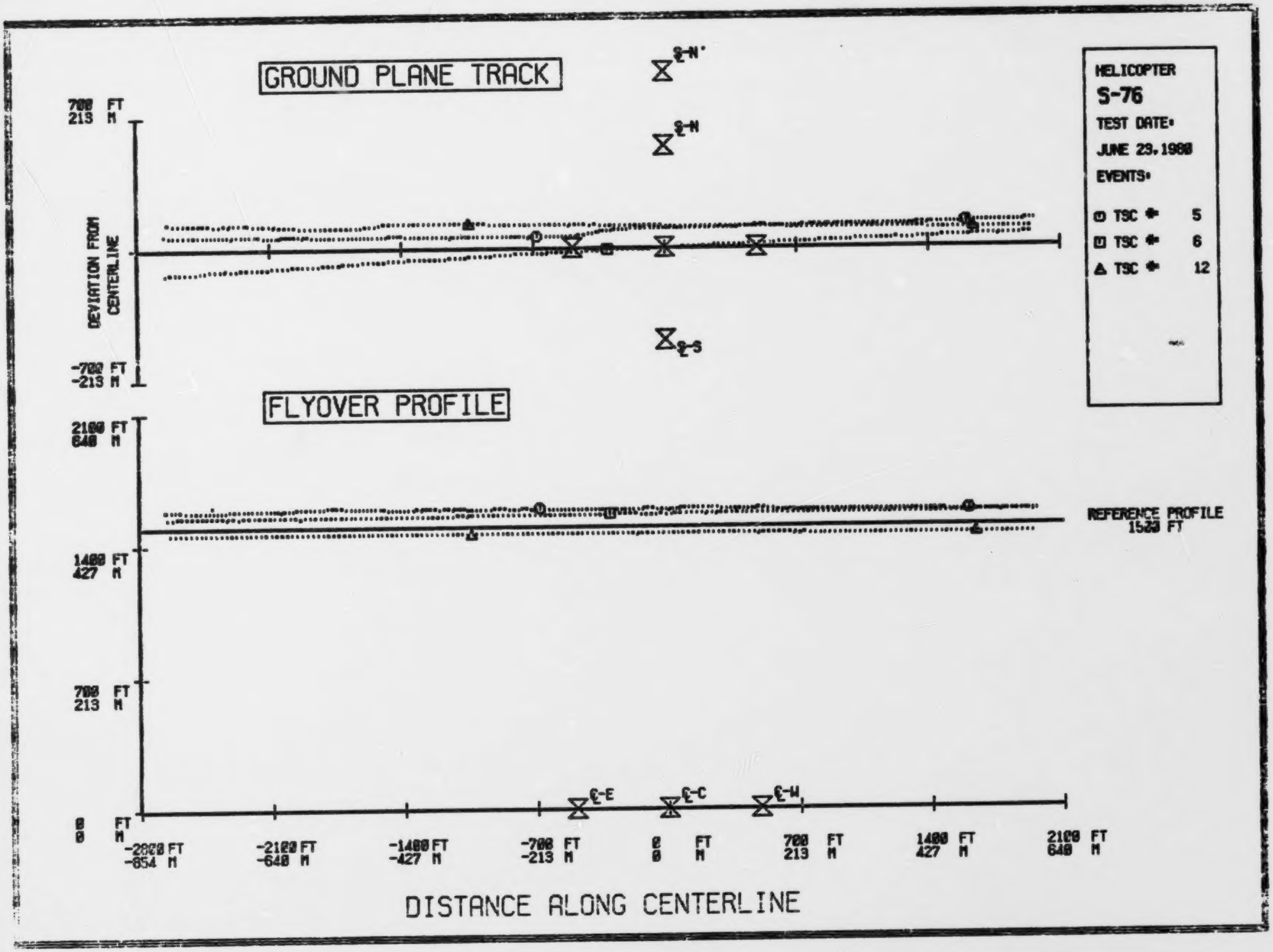

GROUND PLANE TRACK
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
℄-N'
℄-N
℄-S
HELICOPTER
S-76
TEST DATE:
JUNE 23, 1980
EVENTS:
○ TSC # 5
□ TSC # 6
△ TSC # 12
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
1500 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C2-2

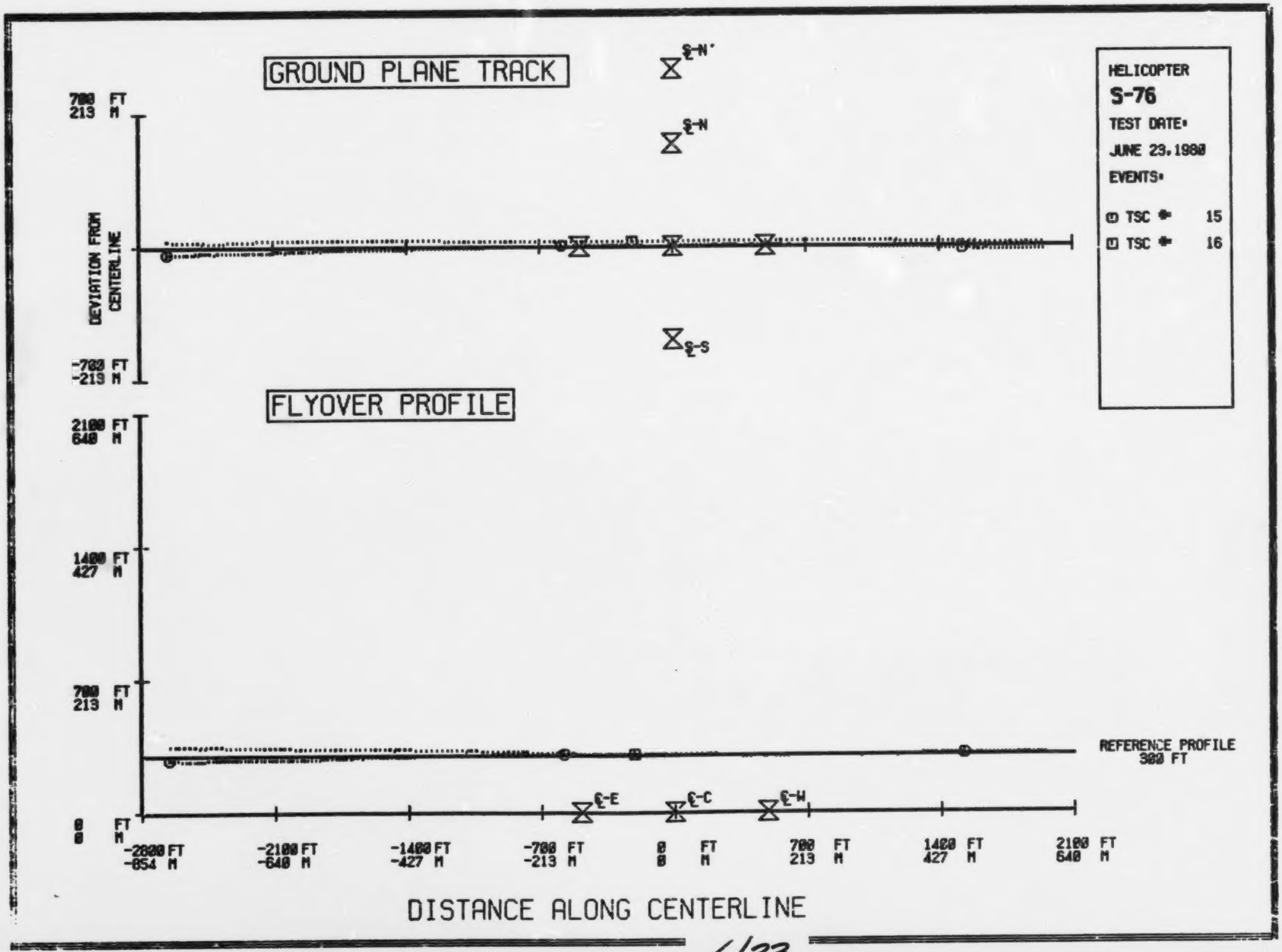

GROUND PLANE TRACK
FLYOVER PROFILE
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE 300 FT
DISTANCE ALONG CENTERLINE
HELICOPTER
S-76
TEST DATE:
JUNE 23, 1980
EVENTS:
TSC # 15
TSC # 16

FIGURE C2-3

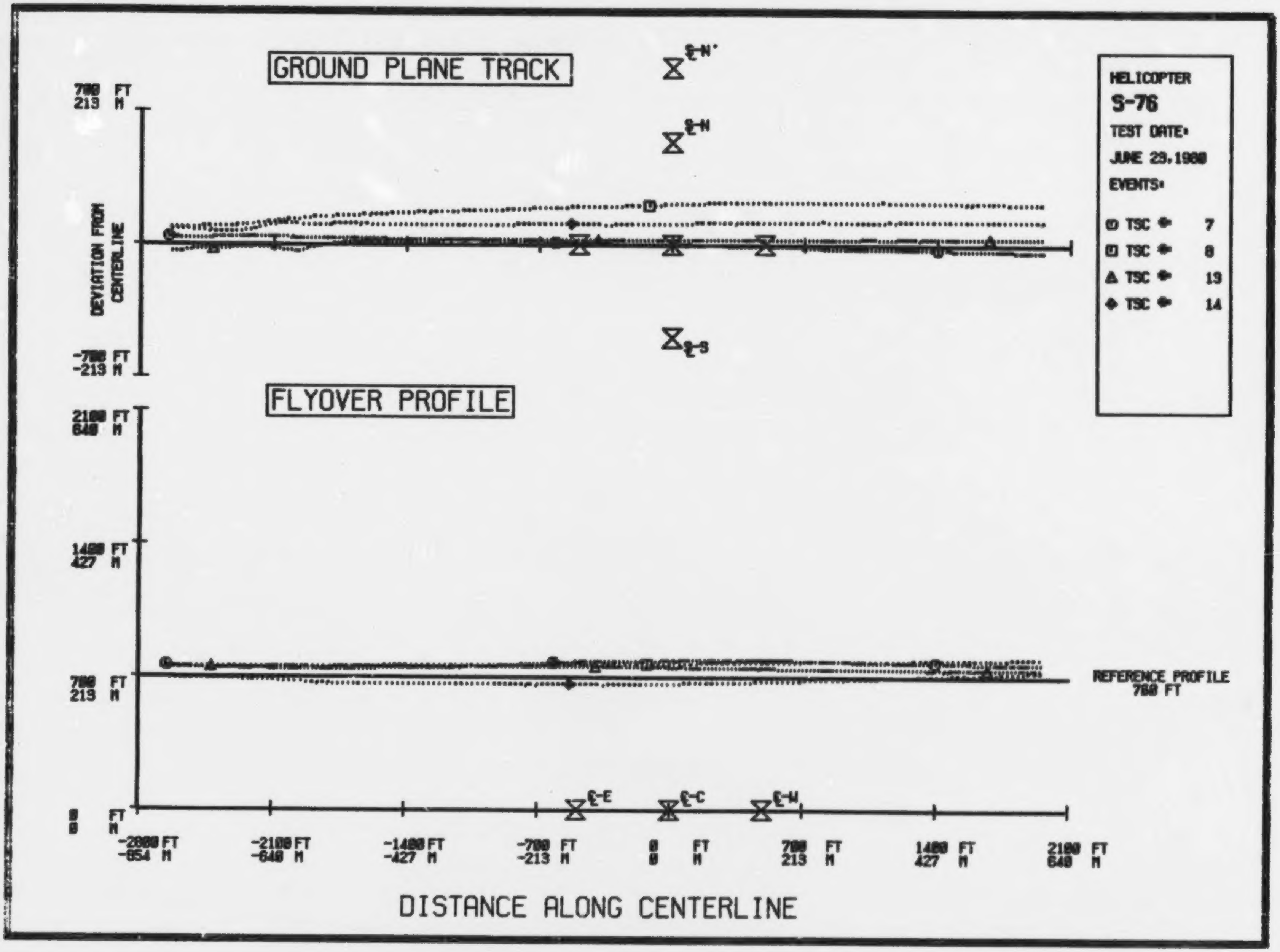

GROUND PLANE TRACK
700 FT 213 M
DEVIATION FROM CENTERLINE
-700 FT -213 M
℄-N'
℄-N
℄-S
FLYOVER PROFILE
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
REFERENCE PROFILE 700 FT
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
S-76
TEST DATE:
JUNE 29,1980
EVENTS:
TSC # 7
TSC # 8
TSC # 13
TSC # 14

FIGURE C2-4

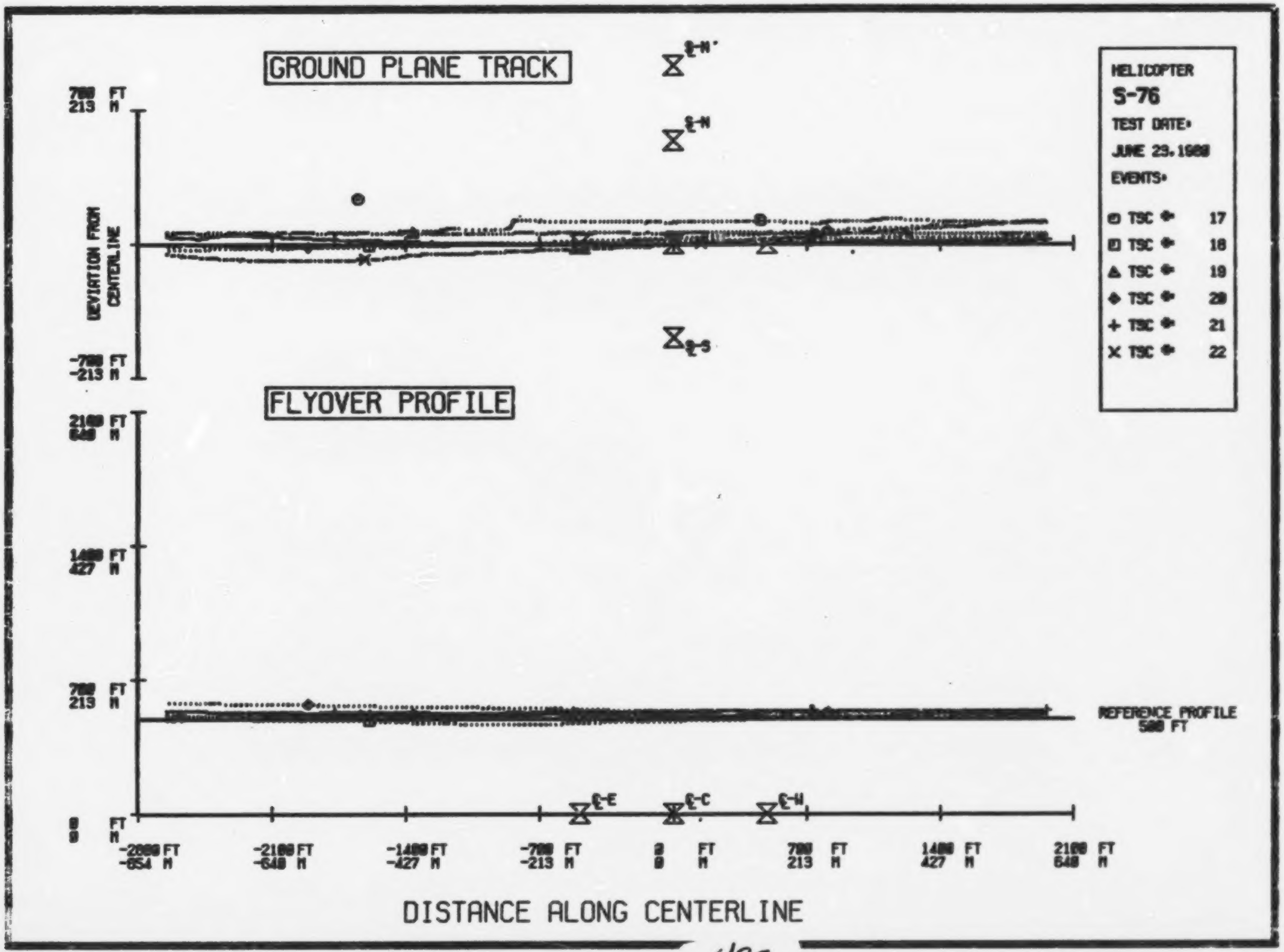

GROUND PLANE TRACK
FLYOVER PROFILE
HELICOPTER
S-76
TEST DATE:
JUNE 29,1980
EVENTS:
⊡ TSC # 17
⊟ TSC # 18
△ TSC # 19
◆ TSC # 20
+ TSC # 21
× TSC # 22
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE 500 FT
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE

FIGURE C2-5

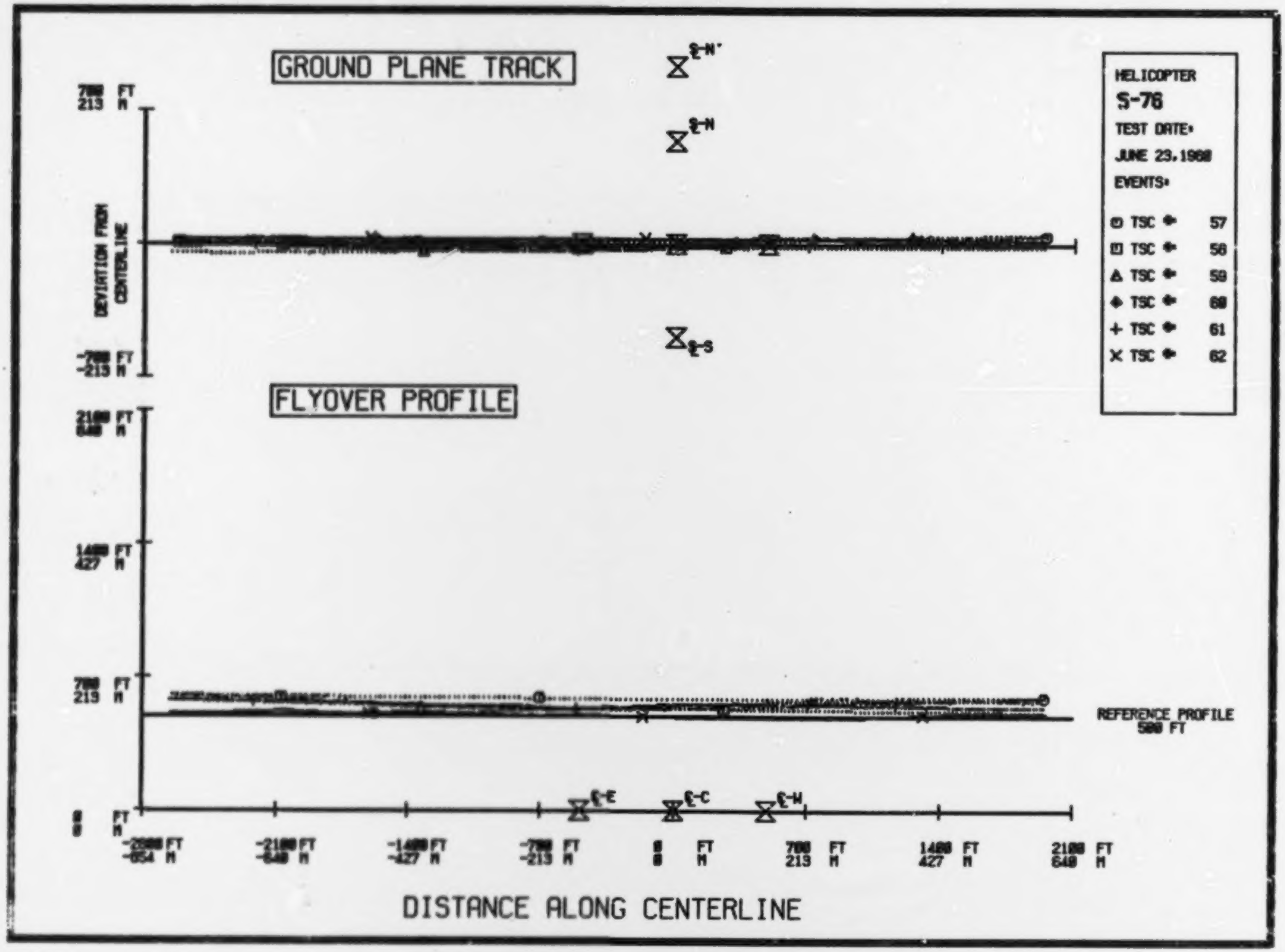
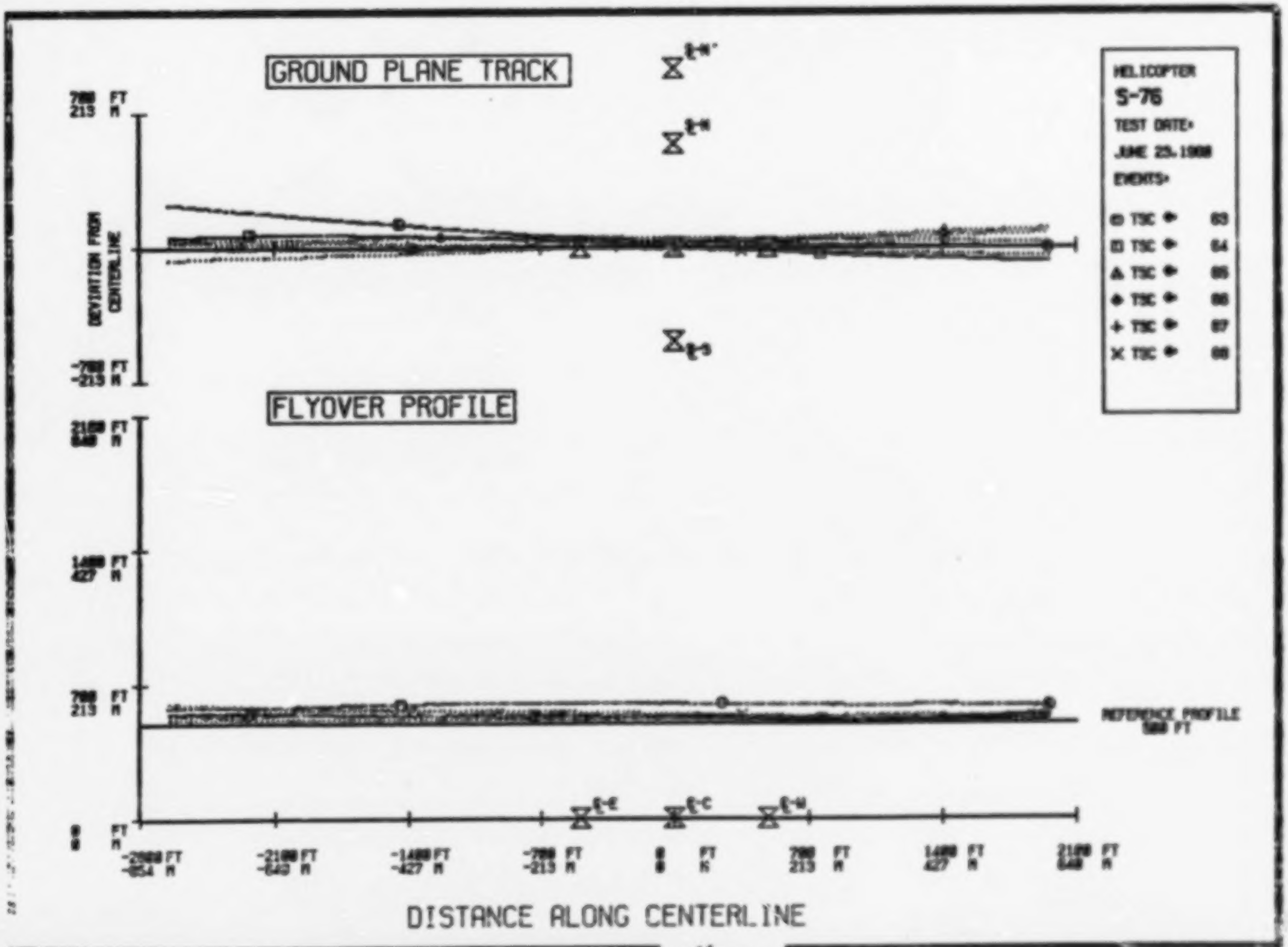

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
HELICOPTER
S-76
TEST DATE:
JUNE 23, 1980
EVENTS:
⊙ TSC # 57
⊡ TSC # 58
△ TSC # 59
◆ TSC # 60
+ TSC # 61
× TSC # 62
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
500 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C2-6



BEST DOCUMENT AVAILABLE

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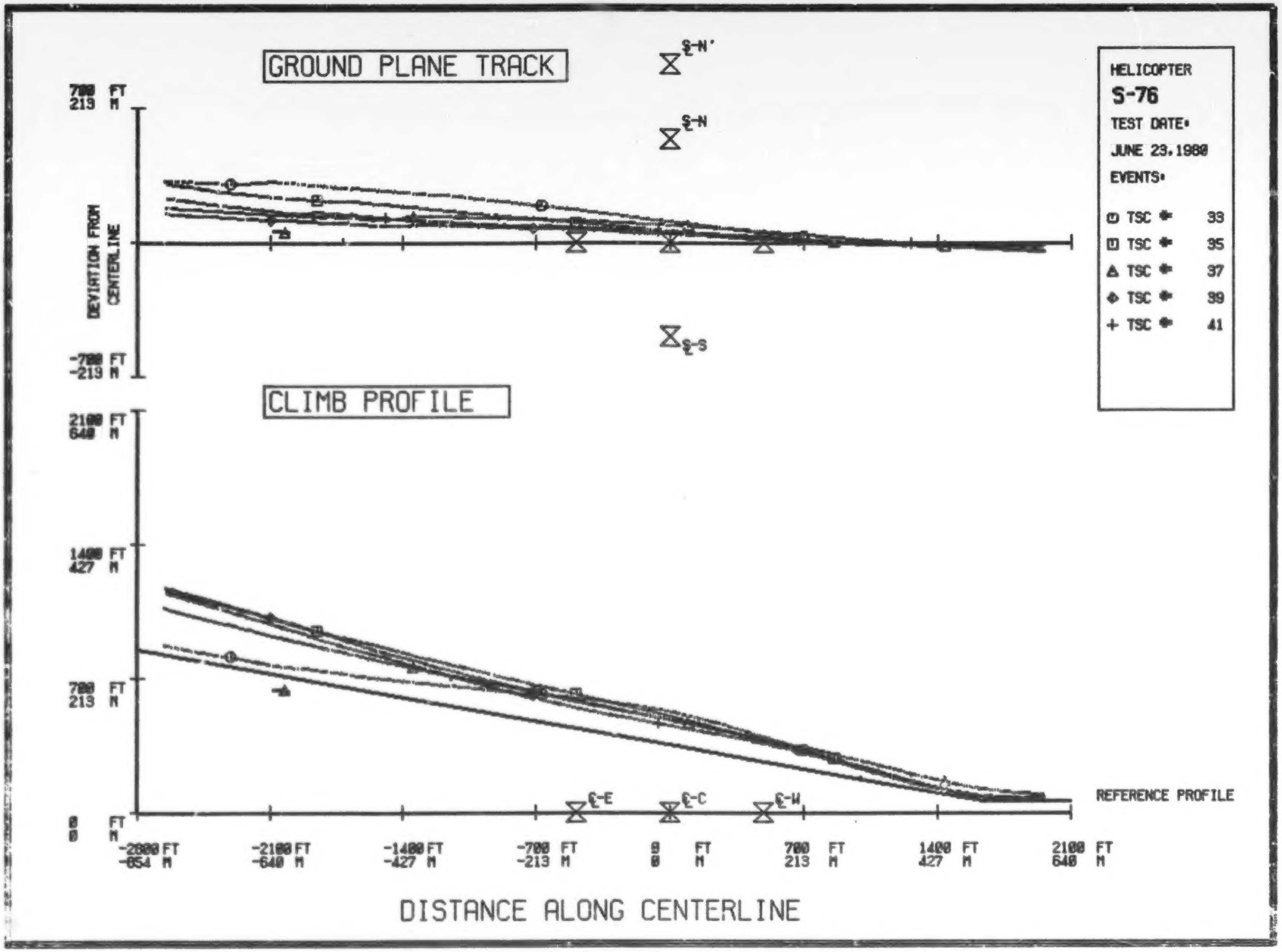
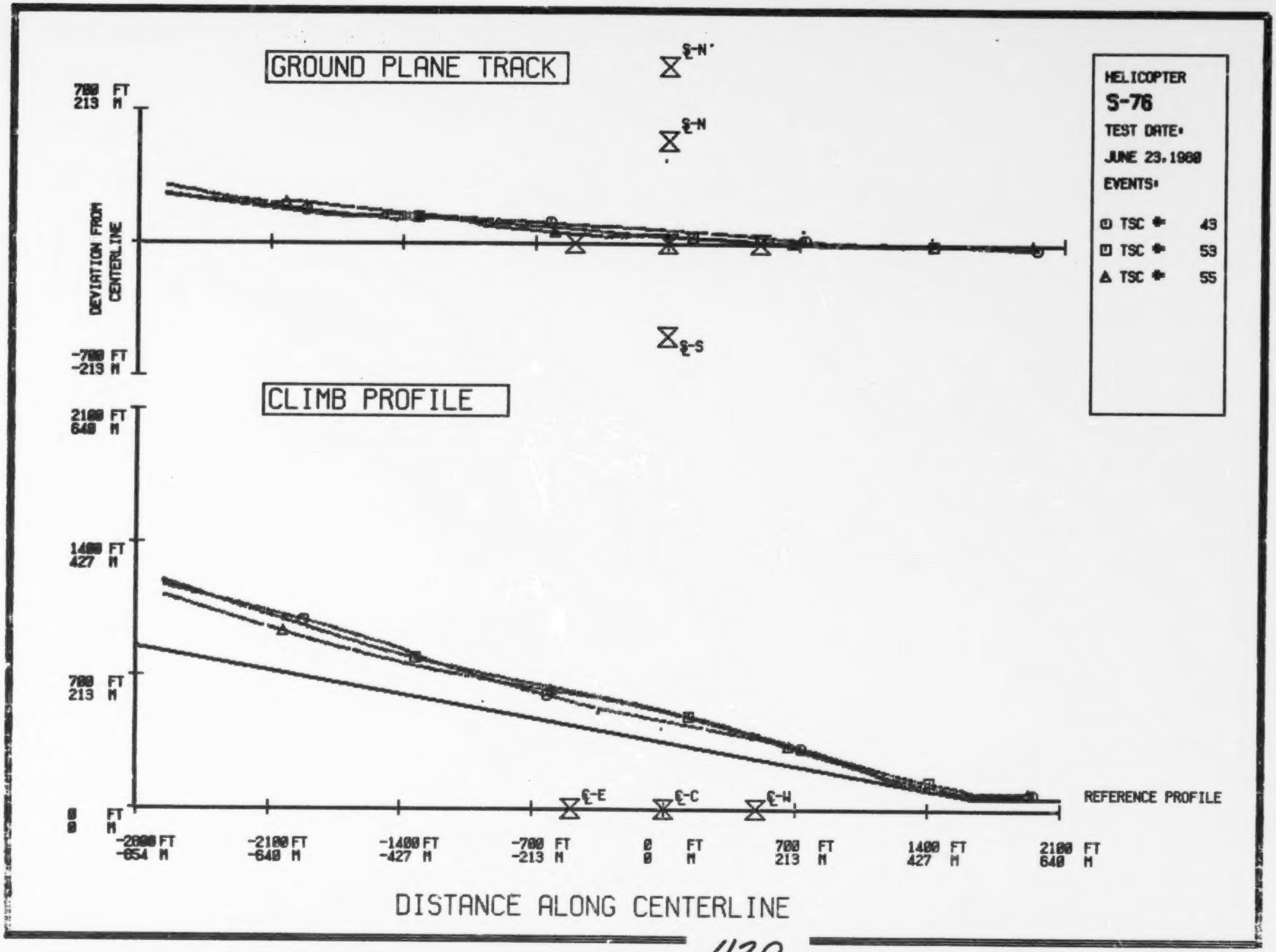
FIGURE C2-7



BEST DOCUMENT AVAILABLE

FIGURE C2-8



BEST DOCUMENT AVAILABLE

FIGURE C2-9

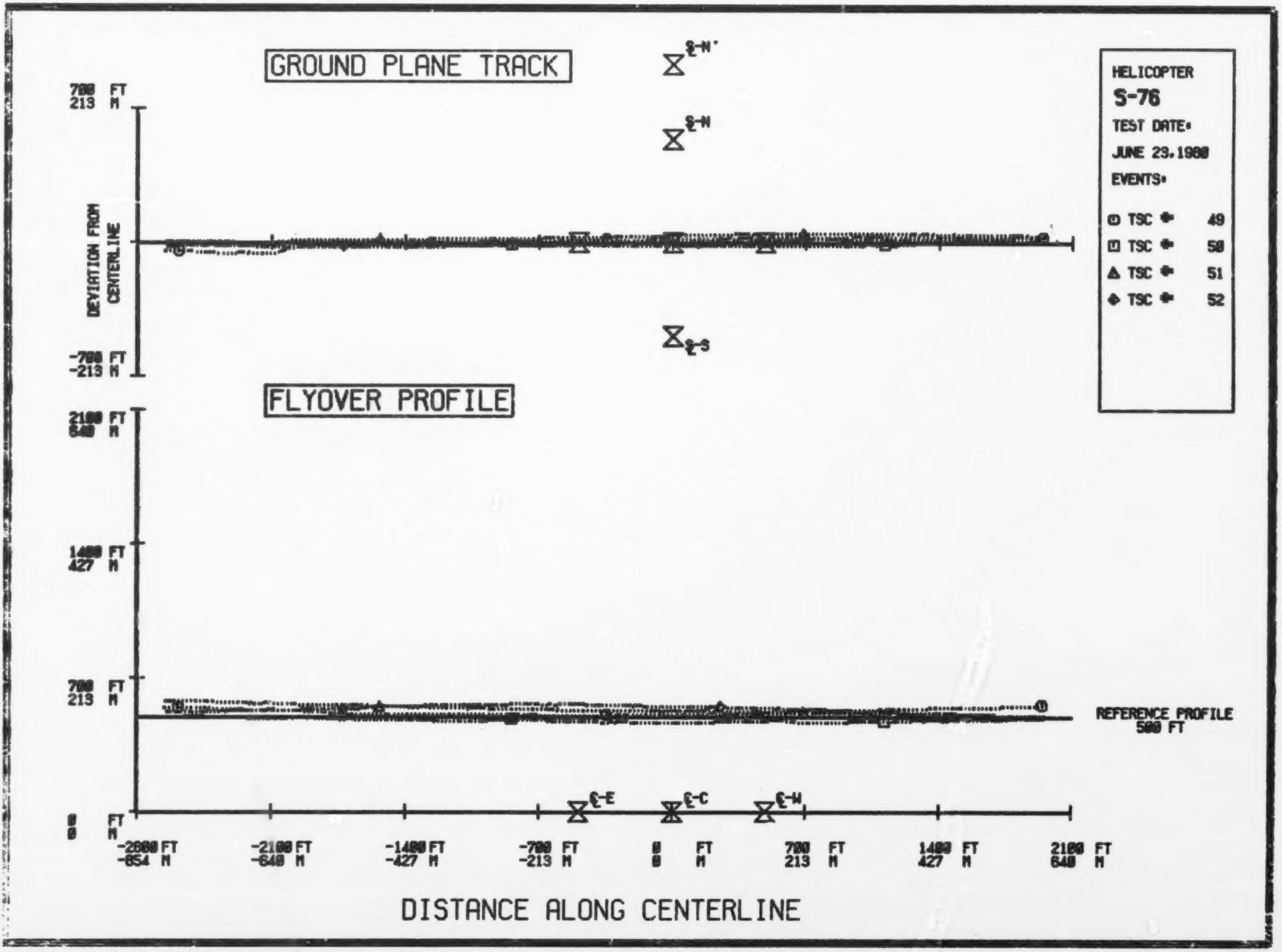
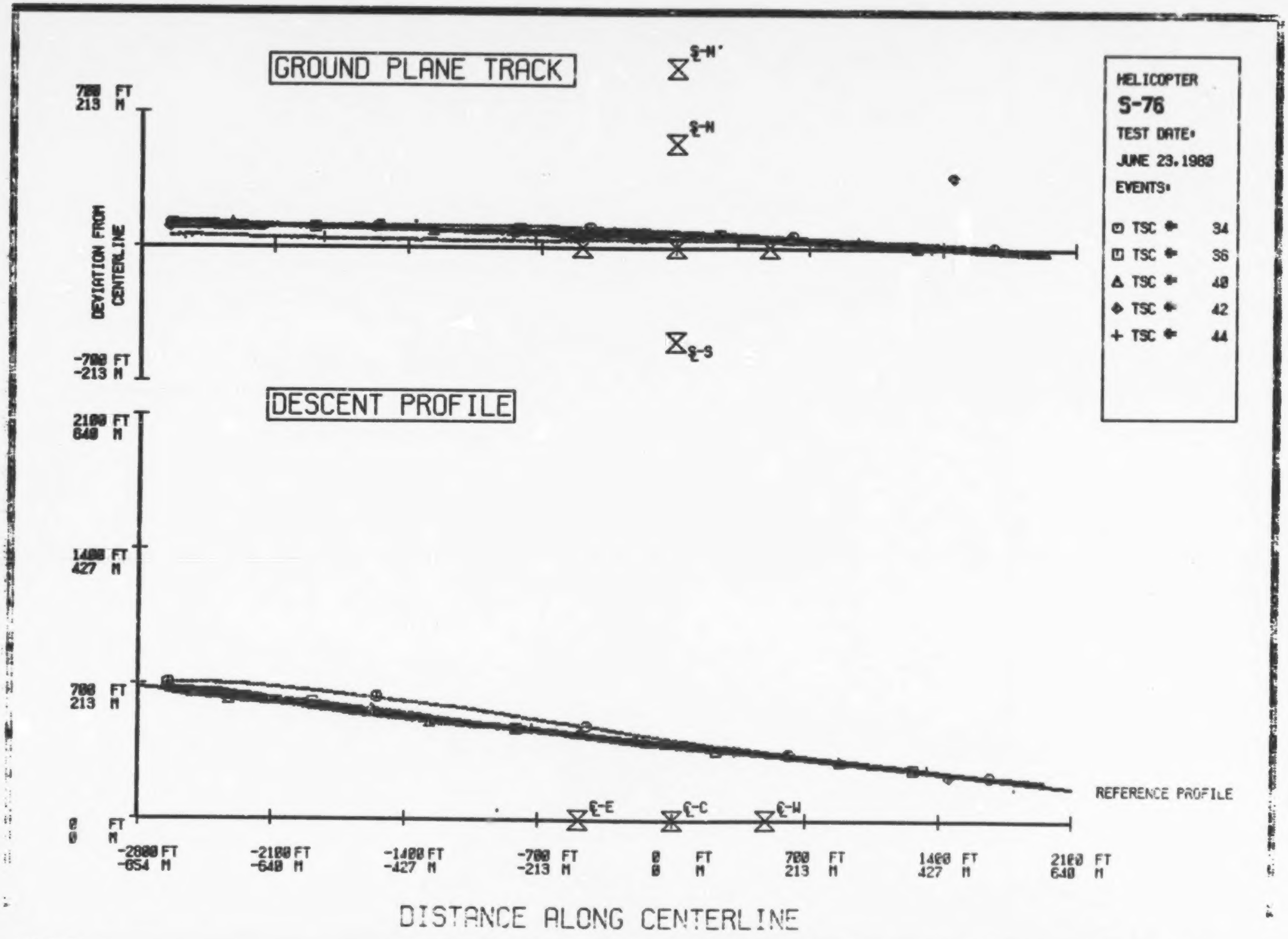

GROUND PLANE TRACK
FLYOVER PROFILE
700 FT 213 M
DEVIATION FROM CENTERLINE
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
REFERENCE PROFILE 500 FT
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
S-76
TEST DATE:
JUNE 23,1980
EVENTS:
⊙ TSC # 49
⊡ TSC # 50
△ TSC # 51
◆ TSC # 52

FIGURE C2-10



BEST DOCUMENT AVAILABLE

FIGURE C2-11

BEST DOCUMENT AVAILABLE

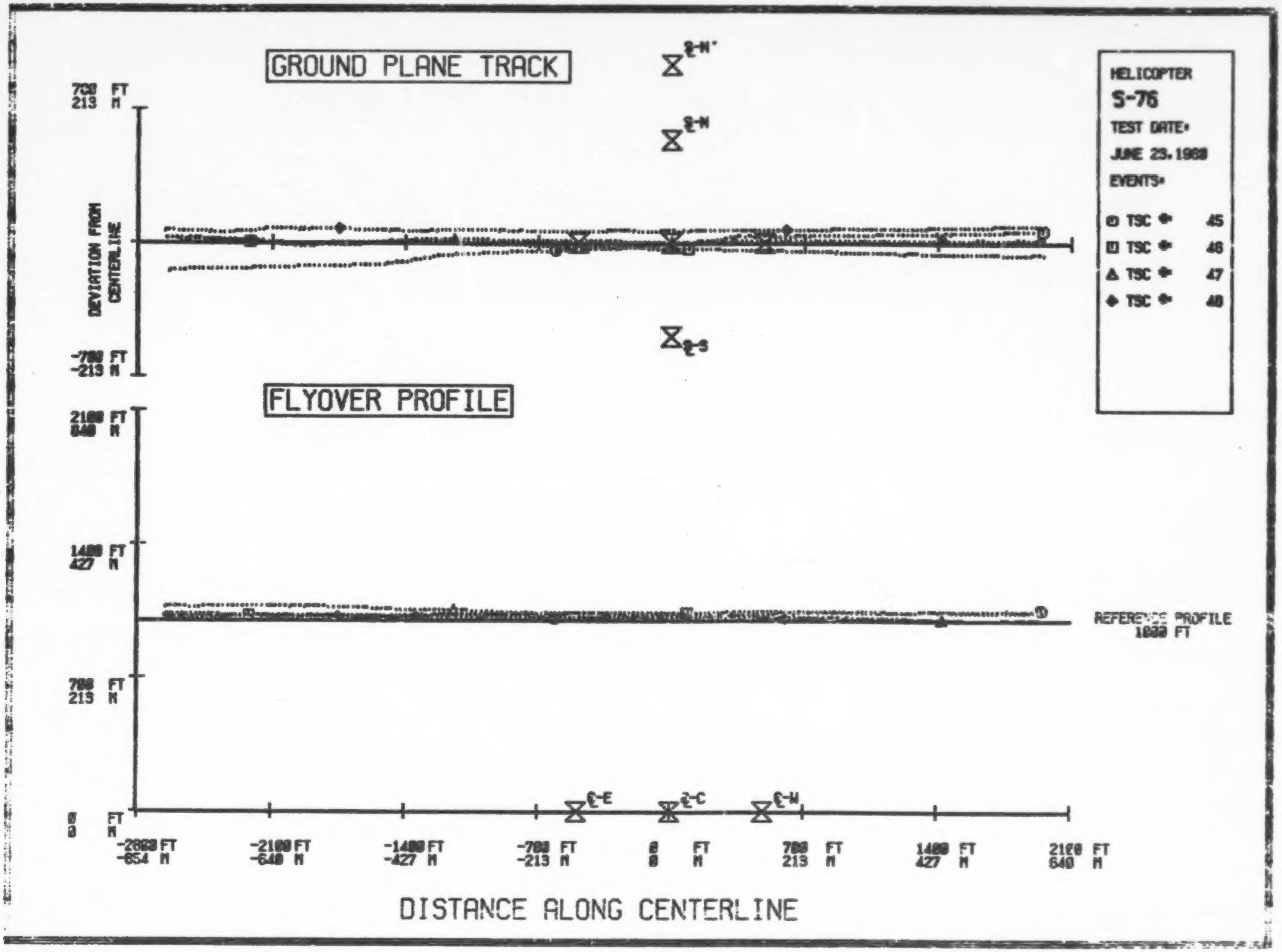


FIGURE C2-12

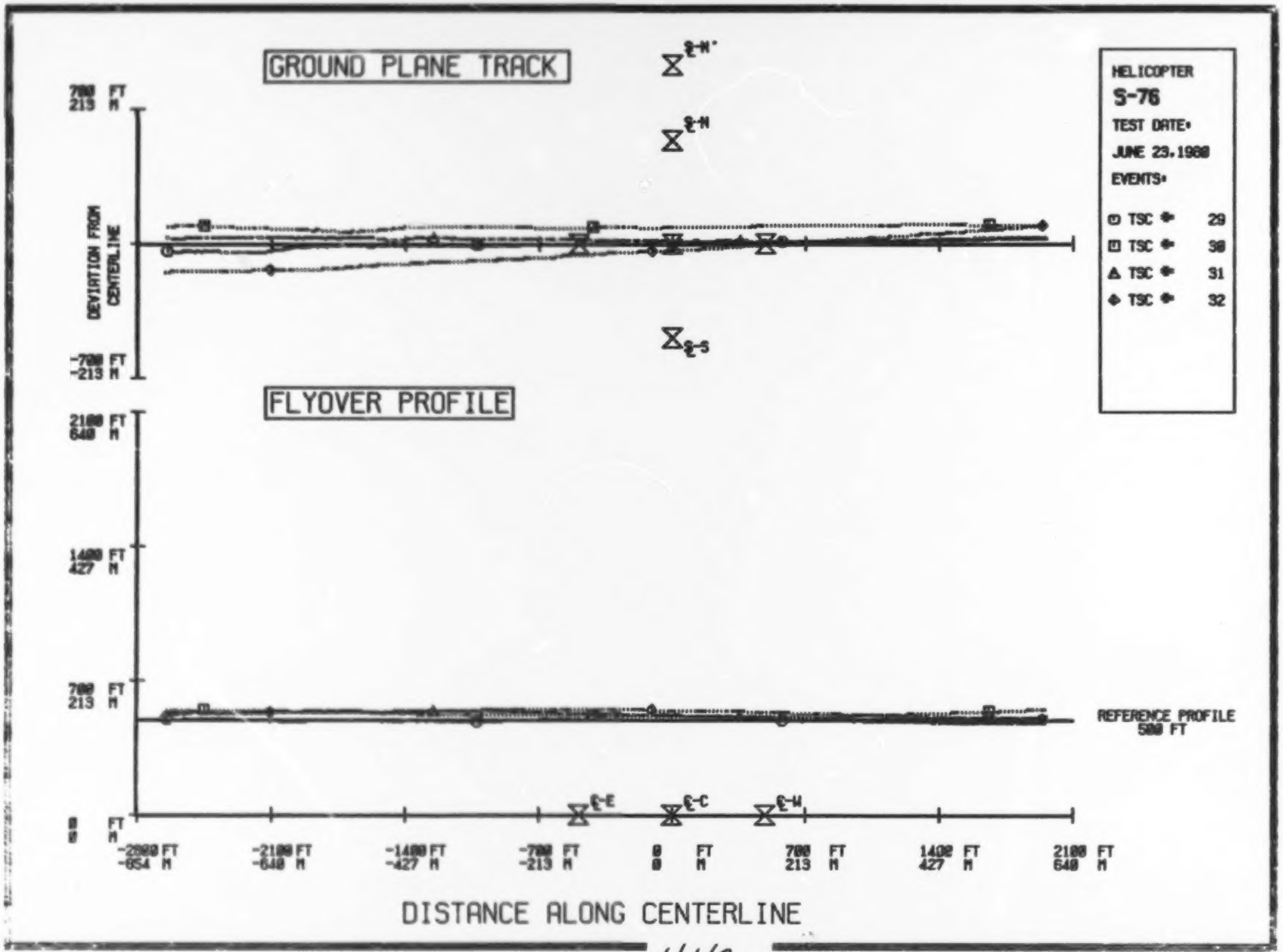

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT 213 M
-700 FT -213 M
DEVIATION FROM CENTERLINE
HELICOPTER
S-76
TEST DATE:
JUNE 23, 1980
EVENTS:
○ TSC # 29
□ TSC # 30
△ TSC # 31
◆ TSC # 32
FLYOVER PROFILE
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
REFERENCE PROFILE 500 FT
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE

TABLE C2-1

POSITION DATA
HELICOPTER NOISE MEASUREMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 180
DEC 13,1980

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
5 F-W	5:28: 8.5	5:28: 7.0	90.7	0.4	132.6	1586.0	1691.0	110.3
6 F-E	5:30:33.0	5:30:31.0	-36.7	-0.1	160.7	1559.1	2244.4	136.0
7 F-W	5:33:12.5	5:33:11.7	243.5	1.2	115.0	782.1	892.4	118.8
8 F-E	5:35:23.0	5:35:22.1	-224.5	-0.7	170.6	794.7	1042.6	130.3
9 F-W	5:37:42.5	5:37:42.2	93.7	0.4	122.6	292.5	387.1	130.9
10 F-E	5:40:32.0	5:40:31.6	69.5	0.3	154.9	305.5	489.3	141.4
12 F-E	5:45:59.5	5:45:58.1	44.2	0.2	155.9	1450.0	1597.2	113.9
13 F-W	5:48:58.5	5:48:57.8	-110.0	[illegible]	122.3	740.5	554.4	118.8
14 F-E	5:51:27.0	5:51:26.1	-453.8	-1.5	171.8	670.6	1009.5	139.4
15 F-W	5:54:12.5	5:54:12.2	-147.8	-0.7	121.0	253.4	367.0	125.8
16 F-E	5:56:28.5	5:56:28.1	175.3	0.9	160.0	303.3	483.2	139.1
17 F-W	5:59: 7.0	5:59: 6.5	99.2	0.4	124.7	516.5	570.9	115.2
18 F-E	6: 4:13.5	6: 4:13.0	-351.2	[illegible]	167.5	410.8	554.1	124.6
19 F-W	6: 6:28.0	6: 6:27.4	63.3	0.3	102.1	537.7	657.9	105.2
20 F-E	6: 8:34.0	6: 8:33.4	158.3	0.6	162.6	[illegible]	659.5	[illegible]
21 F-W	6:11:49.5	6:11:49.0	32.8	[illegible]	[illegible]	[illegible]	644.0	113.6
22 F-E	6:14: 3.0	6:14: 2.3	53.3	[illegible]	102.1	564.6	624.1	141.9
23 F-W	6:16:45.5	6:16:44.9	-51.8	[illegible]	77.8	532.6	732.9	134.4
24 F-E	6:19: 6.5	6:19: 5.7	-24.2	[illegible]	104.6	[illegible]	980.8	142.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-1 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
576
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
DEC 13,1980

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-W	6:26:35.0	6:26:34.5	15.3	0.1	143.3	533.9	588.5	114.9
26 F-E	6:29:10.0	6:29: 9.5	-80.7	-0.3	176.3	547.8	580.6	109.4
27 F-W	6:31:43.5	6:31:43.1	-22.0	-0.1	149.6	483.4	497.1	103.5
28 F-E	6:33:59.5	6:33:59.0	-29.5	-0.1	177.9	502.0	569.2	118.1
29 F-W	6:36:50.5	6:36:50.0	-52.6	-0.3	95.0	492.8	556.9	117.9
30 F-E	6:38:47.0	6:38:46.5	33.2	0.2	123.7	520.0	613.4	120.0
31 F-W	6:41:34.5	6:41:34.0	-204.7	-1.2	97.2	516.5	593.6	117.7
32 F-E	6:43:42.0	6:43:41.5	233.8	1.1	119.6	541.7	610.3	117.4
33 DEP	7:21:50.0	7:21:49.5	1310.3	8.7	84.6	517.2	578.9	63.4
34 ARR	7:24:40.0	7:24:39.6	-831.7	-7.5	62.5	420.0	436.1	74.4
35 DEP	7:28:47.5	7:28:47.1	1983.0	13.7	80.4	436.9	491.5	97.8
36 ARR	7:31:32.5	7:31:32.2	-589.6	-5.4	61.3	383.2	401.2	107.2
37 DEP	7:33:53.5	7:33:53.1	1719.2	11.6	82.9	475.9	487.4	100.7
39 DEP	7:38:46.0	7:38:45.6	1684.3	11.4	82.4	471.4	471.4	90.0
40 ARR	7:41:31.0	7:41:30.6	-654.2	-5.9	62.2	374.9	500.1	122.9
41 DEP	7:46: 5.0	7:46: 4.6	1535.7	10.3	83.4	442.9	445.3	94.5
42 ARR	7:49:11.5	7:49:11.1	-592.0	-5.3	63.4	403.8	465.0	119.7
43 DEP	7:51:46.5	7:51:46.1	1497.3	10.4	80.4	459.3	468.4	101.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-1 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
DEC 13,1980

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
44 ARR	7:54:52.0	7:54:51.7	-683.7	-6.2	61.8	397.0	397.6	93.3
45 F-E	8: 0:15.5	8: 0:14.5	-369.8	-1.4	151.5	1017.9	1116.4	114.3
46 F-W	8: 3: 0.0	8: 2:59.0	130.8	0.5	137.6	1039.5	1171.6	117.5
47 F-E	8: 5:14.0	8: 5:12.8	288.2	1.1	152.6	1027.5	1399.7	132.8
48 F-W	8: 8:29.5	8: 8:28.5	-127.3	-0.5	139.8	1013.9	1147.2	117.9
49 F-E	8:10:36.5	8:10:36.0	-163.7	-0.7	135.3	506.4	604.6	123.1
50 F-W	8:13:29.5	8:13:29.0	-50.2	-0.2	115.9	463.4	542.0	121.2
51 F-E	8:15:58.5	8:15:57.8	164.7	0.7	131.9	525.6	832.0	140.8
52 F-W	8:19:13.0	8:19:12.3	-196.3	-0.9	117.6	548.4	761.6	133.9
53 DEP	8:22:17.5	8:22:17.1	1907.3	13.2	80.3	503.8	504.5	93.0
54 ARR	8:25:49.5	8:25:49.1	-711.8	-6.4	62.6	389.5	466.2	123.3
55 DEP	8:28:24.0	8:28:23.5	1604.7	12.1	74.1	497.7	523.4	72.0
56 ARR	8:41: 5.0	8:41: 4.6	-521.8	-4.7	62.5	390.7	470.2	123.8
57 F-E	8:45:34.5	8:45:33.9	-22.3	-0.1	157.0	553.4	720.2	125.9
58 F-W	8:48:30.5	8:48:29.9	-176.7	-0.7	138.4	538.7	690.3	129.6
59 F-E	8:50:39.5	8:50:38.9	-336.0	-1.2	153.0	531.4	723.2	132.7
60 F-W	8:53:27.5	8:53:26.8	468.8	1.9	136.0	550.3	777.8	135.0
61 F-E	8:57:59.0	8:57:58.4	-17.2	-0.1	100.5	552.9	649.7	121.7
62 F-W	9: 0:58.0	9: 0:57.5	-173.7	-1.1	87.5	429.0	545.2	116.3
63 F-E	9: 7:39.5	9: 7:38.9	46.7	0.3	100.8	594.4	680.5	119.1
64 F-W	9:10:14.5	9:10:14.0	-147.0	-0.9	88.3	522.5	599.8	119.4
65 F-E	9:13:45.5	9:13:44.9	424.5	1.5	165.3	541.1	645.7	123.1
66 F-W	9:16:13.5	9:16:12.9	38.7	0.1	156.1	515.0	743.9	136.2
67 F-E	9:18:35.0	9:18:34.2	245.8	0.8	167.7	521.6	871.7	143.3
68 F-W	9:21: 4.5	9:21: 3.7	12.3	0.0	155.7	530.9	923.7	144.9
69 ARR	9:26:28.5	9:26:28.1	-730.5	-5.9	69.7	382.5	460.7	123.9
70 ARR	9:30:40.5	9:30:40.1	-581.3	-4.5	73.0	396.0	438.5	118.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-2

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
DEC 13,1980

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
5 F-W	5:28:19.5	5:28: 9.0	-115.0	-0.5	136.2	1584.4	1717.0	112.7
6 F-E	5:30:33.0	5:30:31.4	-36.7	-0.1	160.7	1562.2	1871.6	123.4
7 F-W	5:33:15.5	5:33:14.8	-37.3	-0.2	119.3	783.3	847.6	112.5
8 F-E	5:35:22.0	5:36:21.2	-220.0	-0.7	170.8	803.0	913.7	118.5
9 F-W	5:37:45.0	5:37:44.7	238.5	1.1	123.6	301.9	370.7	125.5
10 F-E	5:40:31.0	5:40:30.7	46.3	0.2	157.3	304.1	327.5	111.8
12 F-E	5:45:54.5	5:45:52.6	48.7	0.2	159.3	1459.5	2192.4	138.3
13 F-W	5:49: 1.0	5:49: 0.3	-199.5	-0.9	122.6	741.3	836.4	117.6
14 F-E	5:51:25.0	5:51:24.0	-559.3	-1.9	170.5	681.6	1103.8	141.9
15 F-W	5:54:15.0	5 54:14.7	-68.7	-0.3	124.4	292.1	341.6	121.2
16 F-E	5:56:27.0	5:56:26.7	124.8	0.4	161.1	296.5	389.0	130.3
17 F-W	5:59: 9.0	5:59: 8.5	-128.0	-0.6	130.3	520.2	593.7	118.8
18 F-E	6 4:11.5	6: 4:10.9	-357.0	-1.2	167.6	491.0	646.4	130.6
19 F-W	6: 6:31.0	6: 6:30.5	-59.8	-0.3	124.9	534.2	583.3	113.7
20 F-E	6: 8:32.0	6: 8:31.4	68.0	0.2	163.6	532.0	705.6	131.1
21 F-W	6:11:53.5	6:11:53.0	53.3	0.4	74.5	531.3	588.2	115.4
22 F-E	6:14: 1.5	6:14: 0.9	-80.7	-0.4	108.2	503.9	647.8	129.0
23 F-W	6 16:51.0	6:16:50.5	-19.5	-0.1	77.4	522.0	588.6	117.5
24 F-E	6:19: 5.5	6:19: 4.9	-90.8	-0.5	104.4	522.0	694.3	131.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-2 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC $ 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
DEC 13,1980

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-W	6:26:37.0	6:26:36.5	-0.7	-0.0	142.5	534.3	596.5	116.4
26 F-E	6:29: 7.5	6:29: 6.9	-67.7	-0.2	176.4	549.4	730.7	131.2
27 F-W	6:31:45.0	6:31:44.5	55.0	0.2	149.4	483.0	538.9	116.3
28 F-E	6:33:57.5	6:33:56.9	-231.7	-0.7	178.0	508.5	642.3	127.7
29 F-W	6:36:54.0	6:36:53.5	-54.8	-0.3	94.8	491.6	523.7	110.2
30 F-E	6:38:44.5	6:38:43.9	-96.8	-0.4	122.9	520.0	631.7	124.6
31 F-W	6:41:37.5	6:41:37.0	-270.0	-1.6	97.5	504.4	576.8	119.0
32 F-E	6:43:39.5	6:43:39.0	349.5	1.6	120.2	533.0	602.5	117.8
33 DEP	7:21:45.0	7:21:44.7	2324.8	16.5	77.2	374.2	393.2	72.1
34 ARR	7:24:43.0	7:24:42.7	-814.5	-7.3	62.7	353.0	354.6	95.4
35 DEP	7:28:46.0	7:28:45.6	1989.5	13.8	80.0	365.9	422.5	60.0
36 ARR	7:31:36.0	7:31:35.6	-535.3	-5.0	60.8	336.5	415.8	126.0
37 DEP	7:33:52.0	7:33:51.6	1713.3	11.6	92.4	375.5	417.8	64.0
39 DEP	7:38:43.5	7:38:43.2	1910.3	13.4	79.2	357.9	389.7	66.7
40 ARR	7:41:36.5	7:41:36.2	-706.0	-6.2	63.8	340.4	390.3	119.3
41 DEP	7:46: 2.5	7:46: 2.2	1600.3	11.2	79.6	350.6	374.5	69.4
42 ARR	7:49:16.0	7:49:15.6	-713.0	-6.3	63.9	350.7	421.5	123.7
43 DEP	7:51:44.5	7:51:44.2	1560.4	11.1	78.2	364.6	389.9	69.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TAVLE C2-2 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980 FAA/AEE 120
S76 DEC 13,1980
MIC # 2 CENTERLINE WEST, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
44 ARR	7:54:55.0	7:54:54.6	-620.7	-5.7	61.2	343.4	408.2	122.7
45 F-E	8: 0:11.0	8: 0: 9.6	-168.7	-0.6	151.0	1031.0	1598.0	139.8
46 F-W	8: 3: 2.5	8: 3: 1.5	76.2	0.3	139.1	1044.5	1132.7	112.8
47 F-E	8: 5:13.5	8: 5:12.5	303.7	1.1	153.4	1019.0	1149.0	117.5
48 F-W	8: 8:31.5	8: 8:30.5	-94.0	-0.4	139.3	1012.8	1156.7	118.9
49 F-E	8:10:34.5	8:10:34.0	-382.8	-1.6	135.9	510.9	599.6	121.5
50 F-W	8:13:32.0	8:13:31.5	37.7	0.2	116.1	473.7	541.1	118.9
51 F-E	8:15:57.5	8:15:57.0	265.0	1.1	132.1	523.3	617.1	122.0
52 F-W	8:19:16.5	8:19:16.0	-259.2	-1.3	117.0	539.7	616.9	119.0
53 DEP	8:22:15.5	8:22:15.1	2072.0	14.7	77.8	376.7	429.8	61.2
54 ARR	8:25:54.5	8:25:54.2	-598.7	-5.2	64.7	343.7	398.8	119.0
55 DEP	8:28:17.5	8:28:17.2	2283.2	17.3	72.2	364.2	390.4	111.1
56 ARR	8:41:10.0	8:41: 9.7	-581.7	-5.1	64.2	345.4	405.5	121.6
57 F-E	8:45:32.5	8:45:31.8	-57.8	-0.2	157.4	583.7	750.3	128.9
58 F-W	8:48:33.0	8:48:32.5	-97.0	-0.4	137.8	528.0	623.9	122.9
59 F-E	8:50:38.0	8:50:37.4	-523.8	-1.9	152.9	540.7	660.9	124.8
60 F-W	8:53:30.0	8:53:29.4	414.7	1.7	135.1	566.0	729.2	129.1
61 F-E	8:57:57.0	8:57:56.5	9.2	0.1	99.3	551.4	578.7	107.7
62 F-W	9: 1: 1.0	9: 1: 0.5	-41.2	-0.3	87.7	486.7	564.7	120.5
63 F-E	9: 7:36.5	9: 7:35.9	93.2	0.5	101.2	591.0	685.4	120.4
64 F-W	9:10:16.0	9:10:15.3	-105.2	-0.7	89.7	516.1	781.6	138.8
65 F-E	9:13:43.0	9:13:42.3	293.0	1.0	166.4	528.4	804.4	138.9
66 F-W	9:16:16.5	9:16:16.0	10.2	0.0	157.5	517.5	550.6	110.0
67 F-E	9:18:34.0	9:18:33.4	141.7	0.5	169.0	511.3	679.5	131.2
68 F-W	9:21: 9.0	9:21: 7.5	8.5	0.0	155.6	531.6	583.0	115.3
69 ARR	9:26:33.0	9:26:32.7	-609.8	-5.0	68.5	333.9	390.2	121.2
70 ARR	9:30:45.0	9:30:44.7	-747.7	-5.5	73.0	345.0	374.3	112.8

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-3

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC $ 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
DEC 13,1980

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
5 F-W	5:28: 5.0	5:28: 3.4	-42.0	-0.2	135.7	1584.7	1841.7	120.6
6 F-E	5:30:34.0	5:30:31.8	-61.3	-0.2	160.1	1555.8	2444.3	140.5
7 F-W	5:33: 9.5	5:33: 8.7	453.5	2.1	119.6	773.7	938.0	124.4
8 F-E	5:35:26.0	5:35:25.3	-111.0	-0.4	170.8	787.3	823.5	107.0
9 F-W	5:37:41.0	5:37:40.7	143.3	0.7	122.4	287.7	293.2	101.1
10 F-E	5:40:34.5	5:40:34.2	169.3	0.6	156.3	310.3	363.3	121.3
12 F-E	5:45:58.0	5:45:56.0	47.7	0.2	158.8	1462.3	2233.6	139.1
13 F-W	5:48:55.5	5:48:54.7	61.5	0.3	120.8	753.4	928.0	125.7
14 F-E	5:51:30.0	5:51:29.4	-92.7	-0.3	170.2	665.6	727.2	113.7
15 F-W	5:54:10.5	5:54:10.2	9.2	0.0	123.7	303.6	329.7	113.0
16 F-E	5:56:31.0	5:56:30.7	265.7	0.9	158.5	306.9	339.5	115.3
17 F-W	5:59: 6.0	5:59: 5.5	42.2	0.2	136.6	517.2	519.0	85.2
18 F-E	6: 4:15.5	6: 4:15.0	-280.5	-1.0	166.4	470.1	531.7	117.9
19 F-W	6: 6:26.0	6: 6:25.5	130.8	0.6	123.6	538.6	603.2	116.8
20 F-E	6: 8:36.0	6: 8:35.5	275.0	1.0	161.6	542.1	628.2	120.4
21 F-W	6:11:45.5	6:11:45.0	92.7	0.7	74.3	526.5	586.1	116.1
22 F-E	6:14: 3.5	6:14: 2.4	79.5	0.4	106.8	517.4	1225.4	155.0
23 F-W	6:16:43.5	6:16:43.0	-162.5	-1.2	77.2	523.7	590.3	117.5
24 F-E	6:19: 9.0	6:19: 8.1	-129.2	-0.7	103.6	495.3	1002.2	150.4

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-3 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980 FAA/AEE 120
S76 DEC 13,1980
MIC # 3 CENTERLINE EAST, 4 FT

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25	F-W	6:26:33.5	6:26:33.0	103.2	0.4	142.3	529.5	541.4	102.0
26	F-E	6:29:11.5	6:29:11.0	-79.3	-0.3	176.8	544.5	592.6	113.3
27	F-W	6:31:42.0	6:31:41.6	-28.7	-0.1	149.9	484.9	485.6	93.1
28	F-E	6:34: 1.5	6:34: 1.0	159.3	0.5	176.5	506.0	524.3	105.2
29	F-W	6:36:47.5	6:36:47.0	139.8	0.8	94.6	496.0	550.5	115.7
30	F-E	6:38:50.0	6:38:49.5	115.3	0.5	122.7	525.4	548.4	106.6
31	F-W	6:41:31.5	6:41:31.0	-212.8	-1.3	96.1	527.5	594.1	117.4
32	F-E	6:43:44.5	6:43:44.0	84.5	0.4	119.2	550.7	610.5	115.6
33	DEP	7:21:52.0	7:21:51.5	1015.0	6.4	89.5	613.0	613.7	87.3
34	ARR	7:24:35.5	7:24:35.1	-958.0	-8.5	63.4	495.0	507.9	77.0
35	DEP	7:28:54.0	7:28:53.4	1943.5	13.4	80.8	605.0	697.3	60.2
36	ARR	7:31:30.0	7:31:29.6	-687.0	-6.3	61.4	435.4	447.2	76.8
37	DEP	7:33:57.5	7:33:57.0	1768.8	11.7	84.5	580.5	580.6	91.3
39	DEP	7:38:49.5	7:38:49.0	1868.5	12.1	86.3	569.5	569.4	90.0
40	ARR	7:41:27.0	7:41:26.6	-438.5	-4.0	62.4	445.0	493.0	115.5
41	DEP	7:46: 8.5	7:46: 8.0	1850.4	12.1	85.5	537.9	537.9	90.0
42	ARR	7:49: 7.0	7:49: 6.6	-605.0	-5.8	65.1	450.4	512.5	118.5
43	DEP	7:51:50.5	7:51:50.0	1978.3	13.2	83.4	546.3	547.1	86.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-3 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980 FAA/AEE 120
S76 DEC 13,1980
MIC # 3 CENTERLINE EAST, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
44 ARR	7:54:46.5	7:54:46.1	-599.3	-5.3	63.3	440.5	467.5	109.6
45 F-E	8: 0:18.0	8: 0:17.1	-144.2	-0.5	151.9	1011.5	1050.7	105.7
46 F-W	8: 2:56.0	8: 2:54.7	109.2	0.5	136.7	1035.7	1454.0	134.6
47 F-E	8: 5:17.0	8: 5:15.9	273.7	1.0	151.6	1036.3	1213.0	121.3
48 F-W	8: 8:27.0	8: 8:25.9	9.8	0.0	138.2	1017.2	1212.4	123.0
49 F-E	8:10:38.5	8:10:38.0	-30.5	-0.1	136.3	499.1	623.9	126.9
50 F-W	8:13:27.0	8:13:26.5	-55.3	-0.3	113.9	468.9	550.8	121.6
51 F-E	8:16: 2.0	8:16: 1.5	158.3	0.7	131.2	529.4	618.1	121.1
52 F-W	8:19:12.0	8:19:11.5	-18.2	-0.1	117.9	558.6	590.6	108.9
53 DEP	8:22:23.0	8:22:22.4	1740.2	11.1	87.4	610.9	660.7	67.6
54 ARR	8:25:44.5	8:25:44.0	-729.3	-6.7	61.0	443.5	534.9	124.0
55 DEP	8:28:27.0	8:28:26.5	1356.8	9.3	81.8	599.2	599.8	87.4
56 ARR	8:41: 0.0	8:40:59.5	-655.2	-6.0	61.7	431.7	534.1	126.1
57 F-E	8:45:36.5	8:45:35.9	52.2	0.2	157.1	584.6	695.7	122.8
58 F-W	8:48:29.0	8:48:28.5	-74.2	-0.3	137.7	529.7	613.9	120.4
59 F-E	8:50:42.5	8:50:42.0	30.0	0.1	152.2	527.7	551.1	106.9
60 F-W	8:53:26.5	8:53:26.0	557.7	2.3	135.3	536.4	592.6	115.1
61 F-E	8:58: 2.0	8:58: 1.4	-372.0	-2.1	99.4	531.3	635.2	123.2
62 F-W	9: 0:54.5	9: 0:54.0	-74.7	-0.5	86.7	499.6	557.6	116.3
63 F-E	9: 7:42.5	9: 7:41.9	44.3	0.2	100.5	599.3	672.7	117.0
64 F-W	9:10:11.0	9:10:10.5	-7.2	-0.0	88.6	532.7	619.5	120.7
65 F-E	9:13:47.0	9:13:46.4	363.3	1.2	164.7	550.6	707.1	128.9
66 F-W	9:16:12.5	9:16:12.0	3.7	0.0	155.2	512.7	580.7	118.0
67 F-E	9:18:38.0	9:18:37.5	418.5	1.4	165.8	534.2	597.7	116.7
68 F-W	9:21: 4.0	9:21: 3.5	-29.8	-0.1	156.0	526.8	621.7	122.1
69 ARR	9:26:25.5	9:26:25.1	-780.8	-6.2	70.7	432.7	451.8	106.7
70 ARR	9:30:37.5	9:30:37.1	-871.0	-6.7	72.8	431.0	445.3	104.5

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-4

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC # 4 SIDELINE NORTH, 4 FT

FAA/AEE 120
DEC 13,1980

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
5 F-W	5:28:10.5	5:28: 9.0	-115.0	-0.5	136.2	1640.8	1651.0	96.4
6 F-E	5:30:36.0	5:30:34.4	-55.8	-0.2	160.0	1635.3	1768.0	112.3
7 F-W	5:33:11.5	5:33:10.5	338.3	1.6	119.7	921.7	1130.0	125.3
8 F-E	5:35:22.0	5:35:20.8	-220.0	-0.7	170.8	814.4	1308.9	141.5
9 F-W	5:37:42.5	5:37:41.9	93.7	0.4	122.6	599.4	671.3	116.8
10 F-E	5:40:32.5	5:40:31.9	88.8	0.3	156.1	609.8	681.3	116.5
12 F-E	5:45:56.5	5:45:54.6	46.0	0.2	159.1	1503.8	2194.8	136.7
13 F-W	5:48:59.5	5:48:58.7	-152.3	-0.7	122.0	881.2	908.1	104.0
14 F-E	5:51:28.5	5:51:27.8	-273.0	-0.9	170.9	762.3	806.7	109.1
15 F-W	5:54:13.5	5:54:13.0	-164.7	-0.7	124.6	572.7	575.4	95.6
16 F-E	5:56:28.5	5:56:27.9	175.3	0.6	160.0	553.7	683.4	125.9
17 F-W	5:59: 7.0	5:59: 6.4	99.2	0.4	134.7	628.8	679.8	112.3
18 F-E	6: 4:13.0	6: 4:12.2	-320.0	-1.1	167.3	676.5	862.0	128.3
19 F-W	6: 6:28.0	6: 6:27.3	63.3	0.3	124.1	688.2	798.1	120.4
20 F-E	6: 8:33.5	6: 8:32.7	126.8	0.4	162.9	704.4	900.8	128.6
21 F-W	6:11:49.5	6:11:48.8	32.2	0.2	73.7	722.3	773.9	111.0
22 F-E	6:14: 4.0	6:14: 3.3	114.0	0.6	106.5	710.2	833.1	121.5
23 F-W	6:16:48.0	6:16:47.5	-2.8	-0.0	77.1	582.1	609.8	107.3
24 F-E	6:19:10.0	6:19: 9.4	-149.5	-0.8	103.0	624.0	634.9	100.6

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-4 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC # 4 SIDELINE NORTH, 4 FT

FAA/AEE 120
DEC 13,1980

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25	F-W	6:26:34.5	6:26:33.7	35.5	0.1	143.0	814.9	922.0	117.9
26	F-E	6:29: 9.5	6:29: 8.8	-93.7	-0.3	176.9	645.5	749.5	120.5
27	F-W	6:31:42.5	6:31:41.8	-55.8	-0.2	149.7	634.9	763.6	123.8
28	F-E	6:33:59.0	6:33:58.3	-82.7	-0.3	177.6	625.1	779.2	126.7
29	F-W	6:36:51.5	6:36:50.9	-44.3	-0.3	95.2	694.7	704.7	99.7
30	F-E	6:38:46.5	6:38:45.8	-0.3	-0.0	123.4	653.3	793.6	124.6
31	F-W	6:41:35.5	6:41:34.9	-244.7	-1.5	95.4	702.7	712.3	99.4
32	F-E	6:43:43.0	6:43:42.3	163.5	0.8	119.5	753.5	757.3	95.8
33	DEP	7:21:47.5	7:21:46.9	1851.7	13.0	78.9	642.3	656.0	101.7
34	ARR	7:24:37.5	7:24:37.0	-958.0	-8.5	63.4	579.7	596.4	103.6
35	DEP	7:28:47.0	7:28:46.4	1979.3	13.7	80.0	652.6	680.5	106.4
36	ARR	7:31:32.0	7:31:31.5	-614.0	-5.6	91.5	559.8	584.0	106.6
37	DEP	7:33:54.0	7:33:53.5	1723.8	11.6	83.1	622.1	624.6	95.1
39	DEP	7:38:45.0	7:38:44.4	1749.7	12.0	81.6	649.1	679.2	107.1
40	ARR	7:41:27.0	7:41:26.2	-438.5	-4.0	62.4	598.1	953.1	141.6
41	DEP	7:46: 7.0	7:46: 6.4	1738.7	11.3	85.8	622.1	658.2	70.9
42	ARR	7:49: 8.0	7:49: 7.2	-659.7	-5.7	64.9	582.9	871.6	138.0
43	DEP	7:51:47.0	7:51:46.5	1505.6	10.4	81.1	622.9	626.8	96.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-4 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC # 4 SIDELINE NORTH, 4 FT

FAA/AEE 120
DEC 13,1980

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
44 ARR	7:54:50.0	7:54:49.4	-599.7	-5.5	62.0	636.1	697.5	114.2
45 F-E	8: 0:14.0	8: 0:12.7	-296.2	-1.1	151.7	1133.5	1440.9	128.1
46 F-W	8: 2:58.5	8: 2:57.2	125.7	0.5	137.3	1162.2	1491.1	128.8
47 F-E	8: 5:14.0	8: 5:12.7	288.2	1.1	152.6	1135.6	1492.9	130.5
48 F-W	8: 8:28.0	8: 8:26.7	-179.5	-0.7	139.9	1098.0	1460.7	131.3
49 F-E	8:10:37.0	8:10:36.4	-171.2	-0.7	136.4	693.9	730.3	108.2
50 F-W	8:13:29.0	8:13:28.3	-147.2	-0.7	116.0	658.1	805.2	121.3
51 F-E	8:16: 0.0	8:15:59.3	101.5	0.4	131.3	693.6	751.1	112.6
52 F-W	8:19:13.0	8:19:12.2	-198.3	-0.9	117.6	736.1	927.5	127.6
53 DEP	8:22:17.0	8:22:16.9	1907.3	13.2	80.3	682.7	685.3	95.4
54 ARR	8:25:44.5	8:25:43.6	-729.3	-6.7	61.0	609.5	999.7	142.4
55 DEP	8:28:21.5	8:28:20.9	1979.7	14.2	73.6	676.4	703.7	108.0
56 APP	8:41: 0.0	8:40:59.1	-655.2	-6.0	61.7	635.2	1047.6	142.7
57 F-E	8:45:34.4	8:45:33.2	-28.0	-0.1	157.0	753.1	965.9	128.8
58 F-W	8:48:30.5	8:48:29.7	-176.7	-0.7	139.4	735.9	876.5	122.9
59 F-E	8:50:39.0	8:50:38.1	-400.5	-1.5	153.0	723.3	981.6	132.5
60 F-W	8:53:28.0	8:53:27.3	391.0	1.6	136.2	718.1	849.8	122.3
61 F-E	8:58: 0.0	8:57:59.3	-154.2	-0.9	100.0	754.3	776.0	103.6
62 F-W	9: 0:56.5	9: 0:55.8	-34.2	-0.5	87.2	674.8	840.2	126.8
63 F-E	9: 7:38.0	9: 7:37.1	78.0	0.4	101.0	752.6	989.4	130.5
64 F-W	9:10:13.5	9:10:12.8	-92.0	-0.8	98.0	709.9	841.5	122.8
65 F-E	9:13:45.5	9:13:44.8	421.5	1.5	165.3	712.5	802.9	117.5
66 F-W	9:16:14.0	9:16:13.3	57.0	0.2	156.7	678.4	794.5	121.4
67 F-E	9:18:36.0	9:18:35.3	347.3	1.2	166.8	704.3	800.0	113.4
68 F-W	9:21: 5.5	9:21: 4.7	29.8	0.1	155.9	728.8	868.3	122.9
69 ARR	9:26:29.3	9:26:28.4	-733.8	-5.9	69.9	599.7	838.9	110.2
70 APP	9:30:39.0	9:30:38.3	-795.3	-6.1	73.3	641.0	769.2	123.6

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-5

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC # 5 SIDELINE SOUTH, 4 FT

FAA/AEE 120
DEC 13,1980

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
5 F-W	5:28: 4.5	5:28: 2.4	-107.8	-0.4	136.6	1691.5	2347.0	133.9
6 F-E	5:30:35.0	5:30:33.3	-78.8	-0.3	159.8	1634.3	1924.3	121.9
7 F-W	5:33:14.0	5:33:13.2	71.7	0.3	119.3	926.2	938.0	99.1
8 F-E	5:35:24.0	5:35:23.0	-181.5	-0.6	171.1	1040.8	1121.8	111.9
9 F-W	5:37:42.5	5:37:42.0	93.7	0.4	122.6	544.2	621.5	113.9
10 F-E	5:40:33.0	5:40:32.5	139.8	0.5	156.4	546.6	560.9	102.9
12 F-E	5:45:59.0	5:45:57.4	30.3	0.1	159.1	1576.5	1775.8	117.4
13 F-W	5:49: 0.5	5:48:59.7	-164.7	-0.8	122.2	909.9	910.2	91.4
14 F-E	5:51:29.0	5:51:28.2	-217.8	-0.7	171.3	895.7	909.6	100.0
15 F-W	5:54:13.0	5:54:12.5	-179.2	-0.8	124.3	577.9	596.2	104.2
16 F-E	5:56:29.0	5:56:28.4	173.5	0.0	160.2	601.2	657.2	113.8
17 F-W	5:59: 7.5	5:59: 6.8	74.3	0.3	129.4	788.4	809.7	103.2
18 F-E	6: 4:14.0	6: 4:13.3	-365.3	-1.8	167.1	692.6	738.3	109.0
19 F-W	6: 6:27.0	6: 6:26.1	159.8	0.7	123.3	762.9	1005.1	130.3
20 F-E	6: 8:34.5	6: 8:33.8	208.3	0.7	165.7	746.2	808.3	112.6
21 F-W	6:11:49.5	6:11:48.9	32.2	0.2	73.7	723.0	775.2	111.2
22 F-E	6:14: 2.5	6:14: 1.0	9.0	0.0	107.1	704.1	1074.1	139.0
23 F-W	6:16:45.0	6:16:47.2	-2.8	-0.6	77.1	831.5	852.7	102.8
24 F-E	6:19: 8.5	6:19: 7.7	-125.3	-0.7	103.2	720.1	921.7	122.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-5 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

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TEST DATE:  JUNE 23,1980                                          FAA/AEE 120
            S76                                                   DEC 13,1980
            MIC # 5 SIDELINE SOUTH, 4 FT
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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-W	6:26:35.0	6:26:34.4	15.3	0.1	143.3	666.2	728.7	113.9
26 F-E	6:29:10.5	6:29: 9.8	-69.0	-0.2	177.1	817.0	824.6	97.2
27 F-W	6:31:42.0	6:31:41.2	-28.7	-0.1	149.9	740.5	957.7	129.4
28 F-E	6:34: 0.5	6:33:59.8	25.2	0.1	176.8	772.9	773.1	91.4
29 F-W	6:36:51.5	6:36:50.9	-44.3	-0.3	95.2	698.0	708.2	99.7
30 F-E	6:38:48.0	6:38:47.3	74.2	0.3	122.8	773.2	788.1	101.2
31 F-W	6:41:35.5	6:41:34.8	-244.7	-1.5	95.4	723.9	737.2	100.9
32 F-E	6:43:42.5	6:43:41.8	221.0	1.0	119.9	702.7	746.0	108.2
33 DEP	7:21:50.0	7:21:49.3	1310.3	8.7	84.6	774.9	825.6	69.8
34 ARR	7:24:40.0	7:24:39.4	-831.7	-7.5	62.5	796.6	710.1	84.3
35 DEP	7:28:50.5	7:28:49.8	1958.3	13.3	82.1	727.9	302.1	64.2
36 APR	7:31:33.0	7:31:32.4	-552.7	-5.1	61.3	672.9	692.6	101.4
37 DEP	7:33:56.0	7:33:55.3	1740.0	11.9	84.0	745.1	786.6	71.3
39 DEP	7:38:45.5	7:38:44.9	1722.0	11.7	21.9	711.6	715.2	95.8
40 ARR	7:41:32.5	7:41:31.9	-711.8	-6.3	63.7	650.5	690.2	105.1
41 DEP	7:46: 5.0	7:46: 4.4	1535.7	10.3	83.4	700.2	701.3	93.3
42 ARR	7:49:12.5	7:49:11.9	-601.2	-5.3	63.7	395.9	701.6	102.1
43 DEP	7:51:47.0	7:51:46.4	1505.6	10.4	81.1	718.3	718.7	91.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C2-5 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980 FAA/AEE 120
576 DEC 13,1980
MIC # 5 SIDELINE SOUTH, 4 FT

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
44	ARR	7:54:53.5	7:54:52.9	-663.5	-6.1	61.8	662.7	665.4	84.8
45	F-E	8: 0:16.5	8: 0:15.5	-273.0	-1.0	151.4	1126.3	1157.7	103.4
46	F-W	8: 2:58.5	8: 2:57.2	125.7	0.5	137.3	1137.8	1486.1	130.0
47	F-E	8: 5:17.5	8: 5:16.5	209.5	0.8	151.4	1142.9	1142.9	90.3
48	F-W	8: 8:27.5	8: 8:26.1	-114.2	-0.5	139.7	1155.2	1604.0	133.9
49	F-E	8:10:36.5	8:10:35.8	-163.7	-0.7	136.3	718.0	813.8	118.1
50	F-W	8:13:29.5	8:13:28.8	-50.2	-0.2	115.9	663.5	736.3	115.7
51	F-E	8:16: 0.5	8:15:59.8	93.3	0.4	131.3	745.2	772.8	105.4
52	F-W	8:19:14.5	8:19:13.8	-230.0	-1.1	118.2	738.4	767.2	105.8
53	DEP	8:22:17.5	8:22:16.9	1907.3	13.2	80.3	724.7	725.4	92.8
54	ARR	8:25:50.0	8:25:49.4	-628.2	-5.6	62.9	644.8	689.2	110.7
55	DEP	8:28:25.5	8:28:24.8	1413.2	10.3	77.4	721.0	791.6	65.6
56	ARR	8:41: 7.0	8:41: 6.5	-541.7	-4.9	63.0	620.6	625.2	96.9
57	F-E	8:45:35.5	8:45:34.8	25.7	0.1	157.4	773.1	794.6	103.4
58	F-W	8:48:31.5	8:48:30.8	-12.7	-0.1	138.6	714.2	746.5	107.4
59	F-E	8:50:40.0	8:50:39.3	-294.5	-1.1	153.0	724.7	829.6	119.1
60	F-W	8:53:29.0	8:53:28.3	399.8	1.7	135.2	757.7	782.5	104.5
61	F-E	8:57:59.5	8:57:58.9	-30.0	-0.5	100.6	725.5	780.4	111.6
62	F-W	9: 0:58.5	9: 0:57.8	-125.3	-0.8	87.4	712.0	738.2	105.3
63	F-E	9: 7:40.0	9: 7:39.3	58.0	0.3	100.8	729.8	831.1	108.1
64	F-W	9:10:16.0	9:10:15.4	-105.2	-0.7	89.7	724.9	734.5	99.3
65	F-E	9:13:45.5	9:13:44.7	424.5	1.5	165.3	749.6	861.2	119.6
66	F-W	9:16:13.0	9:16:12.1	19.0	0.1	155.6	744.5	1050.0	134.5
67	F-E	9:18:36.0	9:18:35.3	347.3	1.2	166.8	729.2	841.4	119.9
68	F-W	9:21: 5.0	9:21: 4.2	36.0	0.1	155.5	718.7	965.3	131.9
69	ARR	9:26:28.5	9:26:27.9	-730.5	-5.9	69.7	645.8	702.0	113.1
70	ARR	9:30:39.0	9:30:38.3	-795.3	-6.1	73.3	669.3	753.4	126.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C2-6

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
976
MIC # 6 SIDELINE NORTH, 4 FT

FAA/AEE 120
DEC 13,1980

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
5 F-W	5:28: 6.0	5:28: 4.1	-62.3	-0.3	134.9	1784.9	2211.5	126.2
6 F-E	5:30:34.5	5:30:32.6	-63.5	-0.5	180.3	1816.6	2151.1	122.4
7 F-W	5:33:12.0	5:33:10.8	286.6	1.4	118.7	1812.6	1346.9	115.8
8 F-E	5:35:22.5	5:35:21.3	-219.7	-0.7	170.4	1048.8	1378.3	130.5
9 F-W	5:37:45.0	5:37:44.1	236.5	1.1	123.6	1006.0	1017.8	81.2
10 F-E	5:40:30.5	5:40:29.2	40.0	0.2	157.1	1014.3	1437.2	135.1
12 F-E	5:45:54.5	5:45:52.0	49.7	0.2	159.3	1669.2	2837.6	144.0
13 F-W	5:48:58.0	5:48:56.3	-66.7	-0.3	122.5	1174.0	1317.6	117.0
14 F-E	5:51:29.0	5:51:28.1	-217.5	-0.7	171.3	1052.2	1067.3	99.6
15 F-W	5:54:14.0	5:54:13.1	-132.9	-0.6	124.5	974.5	975.3	92.3
16 F-E	5:56:28.5	5:56:27.8	175.3	0.6	120.0	952.2	1074.6	117.6
17 F-W	5:59: 9.0	5:59: 8.2	-121.0	-0.6	130.3	952.4	963.7	91.0
18 F-E	6: 4:12.5	6: 4:11.4	-340.5	-1.1	187.5	1033.6	1296.8	127.2
19 F-W	6: 6:28.5	6: 6:27.6	-17.2	-0.1	124.3	1083.8	1079.1	102.5
20 F-E	6: 8:33.5	6: 8:32.4	124.7	0.4	162.9	1045.0	1214.0	120.6
21 F-W	6:11:45.5	6:11:44.6	41.8	0.2	74.4	1070.4	1160.8	112.9
22 F-E	6:14: 5.5	6:14: 4.6	175.2	0.5	165.5	1071.5	1080.3	100.1
23 F-W	6:16:51.0	6:16:50.2	-13.5	-0.1	77.4	937.9	916.2	78.5
24 F-E	6:19: 8.0	6:19: 7.1	-112.2	-0.6	103.5	955.7	1351.9	117.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C2-6 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980 FAA/AEE 120
S76 DEC 13,1980
MIC # 6 SIDELINE NORTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-W	6:26:36.5	6:26:35.5	6.0	0.0	143.1	1140.9	1143.8	86.0
26 F-E	6:29:10.5	6:29: 9.6	-69.0	-0.2	177.1	964.1	974.4	98.3
27 F-W	6:31:42.5	6:31:41.5	-55.8	-0.2	149.7	981.2	1101.7	117.1
28 F-E	6:34: 0.0	6:33:59.1	1.7	0.0	176.9	960.8	986.7	103.2
29 F-W	6:36:52.5	6:36:51.6	-32.5	-0.2	95.2	1051.3	1051.5	91.2
30 F-E	6:38:48.5	6:38:47.6	81.7	0.4	122.3	987.4	989.9	94.1
31 F-W	6:41:35.5	6:41:34.6	-244.7	-1.5	95.4	1051.2	1062.9	98.5
32 F-E	6:43:41.5	6:43:40.5	232.0	1.1	119.3	1104.6	1179.6	110.5
33 DEP	7:21:47.0	7:21:46.1	1960.5	13.9	78.2	973.3	1014.1	106.3
34 ARR	7:24:35.5	7:24:34.6	-958.0	-8.5	63.4	940.6	1017.9	112.5
35 DEP	7:28:46.5	7:28:45.6	1969.7	13.7	80.0	1000.5	1057.0	108.8
36 ARR	7:31:30.0	7:31:29.1	-687.0	-6.3	61.4	921.0	1022.4	114.4
37 DEP	7:33:50.0	7:33:48.9	1737.8	12.0	80.8	966.8	1218.6	127.5
39 DEP	7:38:47.0	7:38:46.1	1692.8	11.3	83.8	1003.3	1003.7	88.3
40 ARR	7:41:23.5	7:41:22.2	-522.6	-4.7	62.5	965.8	1506.8	140.1
41 DEP	7:46: 7.0	7:46: 6.1	1729.7	11.3	85.8	982.4	994.0	81.2
42 ARR	7:49: 4.5	7:49: 3.2	-611.8	-5.4	64.5	951.8	1439.3	138.6
43 DEP	7:51:49.5	7:51:48.6	1801.2	12.1	82.8	975.6	996.9	78.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-6 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980 FAA/AEE 120
S76 DEC 13,1980
MIC # 6 SIDELINE NORTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
44 ARR	7:54:49.0	7:54:48.1	-576.8	-5.2	62.9	974.3	1061.9	113.4
45 F-E	8: 0:14.0	8: 0:12.5	-296.2	-1.1	151.7	1382.6	1659.6	123.6
46 F-W	8: 2:59.5	8: 2:58.1	125.5	0.5	137.7	1414.3	1583.1	116.7
47 F-E	8: 5:13.0	8: 5:11.3	281.7	1.0	153.1	1380.9	1911.3	133.7
48 F-W	8: 8:28.5	8: 8:27.1	-179.7	-0.7	139.4	1331.5	1591.3	123.2
49 F-E	8:10:37.0	8:10:36.1	-171.2	-0.7	136.4	1044.5	1084.9	105.7
50 F-W	8:13:31.0	8:13:30.1	104.0	0.5	116.1	1055.0	1056.6	93.2
51 F-E	8:16: 0.5	8:15:59.6	93.3	0.4	131.3	1035.5	1059.7	102.3
52 F-W	8:19:13.5	8:19:12.4	-178.8	-0.9	117.4	1078.3	1199.7	116.0
53 DEP	8:22:21.5	8:22:20.5	1653.8	10.7	86.3	1030.4	1102.6	69.2
54 ARR	8:25:46.5	8:25:45.5	-709.5	-6.5	61.7	997.5	1146.2	120.5
55 DEP	8:28:25.5	8:28:24.6	1418.2	10.3	77.4	1024.7	1058.7	75.4
56 ARR	8:40:55.5	8:40:54.0	-677.2	-6.3	60.8	1032.2	1691.7	142.4
57 F-E	8:45:34.5	8:45:33.4	-22.3	-0.1	157.0	1025.4	1203.9	115.6
58 F-W	8:48:31.5	8:48:30.5	-12.7	-0.1	138.6	1026.4	1127.4	105.5
59 F-E	8:50:39.5	8:50:38.4	-336.0	-1.2	152.0	1070.6	1814.5	118.2
60 F-W	8:53:28.5	8:53:27.5	373.2	1.6	135.6	1055.6	1127.3	110.6
61 F-E	8:57:52.0	8:57:50.2	122.7	0.7	99.7	1121.1	2021.9	147.0
62 F-W	9: 1: 1.0	9: 1: 0.1	-41.2	-0.3	87.7	1028.1	1036.6	82.6
63 F-E	9: 7:34.0	9: 7:32.4	21.0	0.1	101.3	1079.4	1812.8	143.5
64 F-W	9:10:13.5	9:10:12.5	-92.0	-0.6	89.0	1057.3	1161.8	114.5
65 F-E	9:13:46.0	9:13:45.0	419.5	1.4	165.1	1052.3	1090.1	105.1
66 F-W	9:16:13.5	9:16:12.4	38.7	0.1	156.1	1021.2	1203.8	122.0
67 F-E	9:18:36.5	9:18:35.5	415.5	1.4	166.9	1050.9	1092.6	105.9
68 F-W	9:21: 6.0	9:21: 5.0	58.2	0.2	156.3	1078.1	1146.0	109.8
69 ARR	9:26:22.0	9:26:20.7	-806.5	-6.3	71.6	979.2	1533.0	140.3
70 ARR	9:30:39.5	9:30:38.5	-728.3	-5.6	73.2	1026.1	1037.2	110.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-7

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980 FAA/AEE 120
S76 DEC 13,1980
MIC #1G CENTERLINE CENTER, GROUND

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
5 F-W	5:28: 7.5	5:28: 5.9	-83.5	-0.3	134.0	1590.0	1798.8	117.9
6 F-E	5:30:32.5	5:30:30.4	-59.2	-0.2	160.6	1563.1	2368.9	138.7
7 F-W	5:33:11.5	5:33:10.6	338.3	1.6	119.7	786.1	1012.5	129.1
8 F-E	5:35:22.5	5:35:21.5	-219.7	-0.7	170.4	798.6	1168.0	136.9
9 F-W	5:37:42.5	5:37:42.2	93.7	0.4	122.6	296.5	390.0	130.5
10 F-E	5:40:32.5	5:40:32.2	88.8	0.3	156.1	309.5	383.8	126.3
12 F-E	5:45:57.0	5:45:55.2	76.5	0.3	159.0	1464.0	2040.3	134.1
13 F-W	5:48:57.0	5:48:56.1	-36.7	-0.2	121.6	752.5	1067.3	135.2
14 F-E	5:51:26.5	5:51:25.5	-470.7	-1.6	171.3	674.5	1157.5	144.4
15 F-W	5:54:12.5	5:54:12.2	-147.8	-0.7	124.0	302.4	370.3	125.2
17 F-W	5:59: 6.0	5:59: 5.4	42.8	0.2	136.6	520.4	718.8	133.6
18 F-E	6: 4:13.0	6: 4:12.4	-320.0	-1.1	167.3	484.6	694.3	135.8
19 F-W	6: 6:27.5	6: 6:26.8	146.7	0.7	123.6	541.6	738.0	132.8
20 F-E	6: 8:33.5	6: 8:32.8	126.5	0.4	162.9	537.9	772.9	135.5
21 F-W	6:11:48.0	6:11:47.4	78.3	0.6	73.8	533.2	702.6	130.6
22 F-E	6:14: 3.0	6:14: 2.3	53.0	0.3	107.1	512.6	826.6	141.7
23 F-W	6:16:47.0	6:16:46.5	-41.0	-0.3	77.3	526.4	824.5	119.5
24 F-E	6:19: 8.0	6:19: 7.4	-112.2	-0.6	103.5	511.6	726.2	135.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-7

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC #1G CENTERLINE CENTER, GROUND

FAA/AEE 120
DEC 13,1980

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25	F-W	6:26:35.0	6:26:34.5	15.3	0.1	143.3	537.9	592.1	114.7
26	F-E	6:29: 9.5	6:29: 8.9	-99.7	-0.3	176.9	551.7	658.3	123.1
27	F-W	6:31:43.5	6:31:43.1	-22.0	-0.1	149.6	487.4	500.9	103.3
28	F-E	6:33:59.0	6:33:52.4	-82.7	-0.3	177.6	505.9	672.1	131.2
29	F-W	6:36:50.5	6:36:50.0	-52.8	-0.3	95.0	496.8	560.5	117.6
30	F-E	6:38:47.0	6:38:46.5	33.2	0.2	123.7	524.0	616.7	121.9
31	F-W	6:41:35.0	6:41:34.5	-230.2	-1.4	96.2	520.5	552.1	109.5
32	F-E	6:43:41.5	6:43:40.9	232.0	1.1	119.3	545.7	670.1	125.5
33	DEP	7:21:47.5	7:21:47.0	1851.7	13.0	78.9	521.0	524.5	96.6
34	ARR	7:24:39.5	7:24:39.1	-844.3	-7.5	63.2	423.9	428.9	81.3
35	DEP	7:28:50.0	7:28:49.5	1994.3	13.5	81.9	490.8	562.5	60.8
36	ARR	7:31:32.0	7:31:31.6	-614.0	-5.6	61.5	387.1	423.1	113.8
37	DEP	7:33:54.0	7:33:53.6	1723.8	11.6	83.1	482.8	483.0	91.9
39	DEP	7:38:46.0	7:38:45.6	1684.3	11.4	82.4	475.3	475.3	90.7
40	ARR	7:41:31.5	7:41:31.1	-670.3	-6.0	62.7	398.8	469.3	121.9
41	DEP	7:46: 5.0	7:46: 4.6	1535.7	10.3	83.4	447.8	449.2	94.5
42	ARR	7:49:11.5	7:49:11.1	-592.8	-5.3	63.4	407.8	468.6	119.5
43	DEP	7:51:47.5	7:51:47.1	1537.0	10.5	82.0	462.8	466.4	83.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-7 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC #1G CENTERLINE CENTER, GROUND

FAA/AEE 120
DEC 13,1980

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
44	ARR	7:54:52.5	7:54:52.2	-686.0	-6.3	61.6	400.9	401.0	90.9
45	F-E	8: 0:13.5	8: 0:12.2	-254.3	-0.9	152.3	1021.9	1465.4	135.8
46	F-W	8: 3: 0.0	8: 2:59.0	130.8	0.5	137.6	1043.5	1175.1	117.4
47	F-E	8: 5:13.5	8: 5:12.2	303.7	1.1	153.4	1031.5	1511.9	137.0
48	F-W	8: 8:27.5	8: 8:26.2	-114.2	-0.5	139.7	1017.9	1490.2	136.9
49	F-E	8:10:36.5	8:10:36.0	-163.7	-0.7	136.3	510.4	607.9	122.9
50	F-W	8:13:29.0	8:13:28.5	-147.2	-0.7	116.0	467.4	605.8	129.5
51	F-E	8:15:52.5	8:15:57.8	164.7	0.7	131.9	529.6	836.2	140.7
52	F-W	8:19:13.0	8:19:12.3	-196.3	-0.9	117.6	552.4	764.6	133.7
53	DEP	8:22:19.0	8:22:18.5	1781.0	12.0	82.4	507.7	539.3	70.3
54	ARR	8:25:49.5	8:25:49.1	-711.8	-6.4	62.6	393.5	469.8	123.1
55	DEP	8:28:23.5	8:28:23.1	1670.0	12.6	73.6	501.5	511.2	78.8
56	ARR	8:41: 5.0	8:41: 4.6	-521.8	-4.7	62.5	394.7	473.7	123.6
57	F-E	8:45:34.5	8:45:33.9	-22.3	-0.1	157.0	537.4	723.4	125.7
58	F-W	8:48:30.0	8:48:29.3	-171.8	-0.7	138.5	536.7	785.2	136.9
59	F-E	8:50:39.5	8:50:38.9	-336.0	-1.2	153.0	535.4	727.9	132.7
60	F-W	8:53:27.5	8:53:26.8	468.8	1.9	136.0	554.3	780.6	134.8
61	F-E	8:57:59.0	8:57:58.4	-17.2	-0.1	100.5	556.9	653.1	121.5
62	F-W	9: 0:57.5	9: 0:57.0	-171.5	-1.1	87.5	492.9	589.8	123.3
63	F-E	9: 7:39.0	9: 7:38.4	51.2	0.3	100.7	598.4	732.6	125.2
64	F-W	9:10:14.0	9:10:13.4	-150.8	-1.0	87.7	526.5	646.4	125.5
65	F-E	9:13:45.5	9:13:44.9	424.5	1.5	165.3	545.1	649.0	123.9
66	F-W	9:16:13.5	9:16:12.5	38.7	0.1	159.1	512.9	748.7	136.1
67	F-E	9:18:34.5	9:18:33.6	216.7	0.7	167.9	525.6	1022.6	149.1
68	F-W	9:21: 5.0	9:21: 4.3	36.3	0.1	155.5	534.9	802.4	138.2
69	ARR	9:26:29.0	9:26:28.6	-733.8	-5.9	69.9	356.4	432.2	116.6
70	ARR	9:30:40.5	9:30:40.1	-581.3	-4.5	73.0	390.0	442.2	115.1

REC. TIME:TIME PNLTM WAS RECORDED. RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C2-8

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
DEC 13,1980

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
5 F-W	5:28: 7.0	5:23: 5.4	9.2	0.0	134.8	1557.1	1836.8	122.0
6 F-E	5:30:34.0	5:30:32.2	-61.3	-0.2	160.1	1530.1	1996.6	130.0
7 F-W	5:33:12.5	5:33:11.7	243.5	1.2	118.0	753.1	864.5	119.4
8 F-E	5:35:22.0	5:35:20.9	-220.0	-0.7	170.8	766.8	1277.1	143.1
9 F-W	5:37:43.0	5:37:42.7	135.0	0.6	123.3	263.7	295.6	116.8
10 F-E	5:40:32.5	5:40:32.2	88.8	0.3	156.1	276.7	352.9	128.4
12 F-E	5:45:58.5	5:45:57.0	37.5	0.1	158.5	1431.1	1712.5	123.3
13 F-W	5:48:58.5	5:48:57.8	-110.0	-0.5	122.3	719.5	826.9	119.5
14 F-E	5:51:27.5	5:51:26.7	-399.2	-1.3	170.9	642.0	859.0	131.6
15 F-W	5:54:12.5	5:54:12.2	-147.8	-0.7	124.0	269.4	340.9	127.8
17 F-W	5:59: 6.5	5:59: 6.0	73.5	0.3	137.3	493.2	602.9	125.9
18 F-E	6: 4:13.0	6: 4:12.4	-320.0	-1.1	167.3	401.6	687.6	137.4
19 F-W	6: 6:28.5	6: 6:28.0	-13.2	-0.1	124.3	505.9	561.8	115.1
20 F-E	6: 8:34.0	6: 8:33.4	158.3	0.6	162.8	505.0	633.1	127.1
21 F-W	6:11:48.5	6:11:47.9	41.9	0.3	74.4	500.2	632.3	127.7
22 F-E	6:14: 2.5	6:14: 1.7	9.0	0.0	107.1	479.6	529.8	147.4
23 F-W	6:16:47.0	6:16:46.5	-41.0	-0.3	77.3	495.5	576.8	120.8
24 F-E	6:19: 8.0	6:19: 7.4	-112.2	-0.6	103.5	479.5	593.9	136.8

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

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BEST DOCUMENT AVAILABLE

TABLE C2-8 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
DEC 13,1980

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-W	6:26:35.0	6:26:34.5	15.3	0.1	143.3	505.3	559.7	115.5
26 F-E	6:29: 9.5	6:29: 9.0	-99.7	-0.3	176.9	519.6	626.6	124.0
27 F-W	6:31:43.0	6:31:42.6	-48.7	-0.2	149.5	454.8	516.3	118.3
28 F-E	6:33:59.0	6:33:58.4	-82.7	-0.3	177.6	473.6	641.9	132.4
29 F-W	6:36:50.0	6:36:49.5	-41.3	-0.2	95.2	463.8	576.0	126.4
30 F-E	6:38:47.0	6:38:46.5	33.2	0.2	123.7	491.4	587.0	123.2
31 F-W	6:41:34.5	6:41:34.0	-206.7	-1.2	97.2	487.6	556.3	118.8
32 F-E	6:43:41.5	6:43:40.9	232.0	1.1	119.3	512.8	640.2	126.8
33 DEP	7:21:48.5	7:21:48.1	1601.5	10.9	81.8	489.4	494.8	81.5
34 ARR	7:24:40.0	7:24:39.6	-831.7	-7.5	62.5	392.0	411.1	72.5
35 DEP	7:28:49.0	7:28:48.6	1951.8	13.4	81.1	458.8	477.8	73.8
36 ARR	7:31:32.0	7:31:31.7	-614.0	-5.6	61.5	354.9	391.4	114.9
37 DEP	7:33:54.0	7:33:53.6	1729.8	11.6	83.1	451.1	451.6	92.7
39 DEP	7:38:46.0	7:38:45.6	1684.3	11.4	82.4	443.2	443.3	91.4
40 ARR	7:41:32.0	7:41:31.6	-689.5	-6.1	63.6	366.3	411.7	117.1
41 DEP	7:46: 5.0	7:46: 4.6	1535.7	10.3	83.4	415.5	417.2	95.2
42 ARR	7:49:11.5	7:49:11.1	-592.8	-6.3	63.4	375.4	437.4	120.9
43 DEP	7:51:47.5	7:51:47.1	1537.0	10.5	82.0	431.2	434.5	83.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-8 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
DEC 13,1980

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
44 ARR	7:54:52.5	7:54:52.2	-686.0	-6.3	61.6	368.2	368.4	88.3
45 F-E	8: 0:15.0	8: 0:14.0	-354.2	-1.3	151.4	988.9	1157.5	121.3
46 F-W	8: 2:59.5	8: 2:58.4	125.5	0.5	137.7	1010.5	1204.6	123.0
47 F-E	8: 5:14.0	8: 5:12.8	288.2	1.1	152.6	998.5	1375.3	133.4
48 F-W	8: 8:29.5	8: 8:28.5	-127.3	-0.5	139.8	984.9	1118.0	118.2
49 F-E	8:10:36.5	8:10:36.0	-163.7	-0.7	136.3	477.4	577.7	124.3
50 F-W	8:13:29.5	8:13:29.1	-50.2	-0.2	115.9	434.5	515.1	122.5
51 F-E	8:15:59.5	8:15:59.0	127.5	0.5	131.5	496.7	629.1	127.9
52 F-W	8:19:13.5	8:19:12.9	-178.8	-0.9	117.4	519.4	661.2	128.2
53 DEP	8:22:17.5	8:22:17.1	1907.3	13.2	80.3	475.7	476.5	93.2
54 ARR	8:25:49.0	8:25:48.6	-685.0	-6.2	61.9	360.6	472.1	130.2
55 DEP	8:28:22.5	8:28:22.1	1776.7	13.5	73.2	469.7	470.1	92.2
56 ARR	8:41: 5.0	8:41: 4.6	-521.8	-4.7	62.5	361.9	444.0	125.4
57 F-E	8:45:34.0	8:45:33.3	-28.0	-0.1	157.0	554.4	797.5	136.0
58 F-W	8:48:30.0	8:48:29.3	-171.8	-0.7	138.5	503.7	757.6	138.3
59 F-E	8:50:39.5	8:50:38.9	-336.0	-1.2	153.0	502.4	698.2	134.0
60 F-W	8:53:28.0	8:53:27.4	394.3	1.6	136.2	521.3	664.0	128.3
61 F-E	8:57:58.5	8:57:57.9	16.8	0.1	100.2	524.0	677.0	129.3
62 F-W	9: 0:58.0	9: 0:57.6	-173.7	-1.1	87.5	460.0	517.0	117.2
63 F-E	9: 7:39.5	9: 7:38.9	46.7	0.3	100.8	565.4	653.9	120.2
64 F-W	9:10:14.5	9:10:14.0	-147.0	-0.9	88.3	493.6	572.2	120.4
66 F-W	9:16:13.5	9:16:12.9	38.7	0.1	156.1	486.1	720.3	137.6
67 F-E	9:18:36.0	9:13:35.5	347.3	1.2	166.8	492.6	601.6	125.0
68 F-W	9:21: 5.5	9:21: 4.9	29.8	0.1	155.9	501.9	659.2	130.4
69 ARR	9:26:28.5	9:26:28.1	-730.5	-5.9	69.7	353.7	434.1	125.4
70 ARR	9:30:41.0	9:30:40.7	-550.0	-4.3	73.0	357.0	381.4	110.6

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C2-9

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
DEC 13,1980

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
5 F-W	5:28: 8.5	5:28: 6.9	90.7	0.4	132.6	1695.3	1788.4	108.6
6 F-E	5:30:37.0	5:30:35.5	-98.0	-0.3	159.8	1638.1	1691.5	104.4
7 F-W	5:33:12.0	5:33:11.0	286.2	1.4	118.7	929.6	1084.6	121.0
8 F-E	5:35:23.5	5:35:22.5	-250.8	-0.8	171.0	1043.8	1193.0	119.0
12 F-E	5:45:57.5	5:45:55.7	64.8	0.2	158.9	1580.2	2034.4	129.0
13 F-W	5:48:59.5	5:48:58.7	-152.3	-0.7	122.0	913.2	939.6	103.6
14 F-E	5:51:27.5	5:51:26.5	-399.2	-1.3	170.9	898.6	1100.6	125.3
15 F-W	5:54:13.5	5:54:13.0	-164.7	-0.7	124.6	579.9	530.7	92.9
16 F-E	5:56:29.0	5:56:28.4	173.5	0.6	160.2	603.2	659.1	113.8
17 F-W	5:59: 8.0	5:59: 7.3	4.3	0.0	130.5	791.0	792.7	93.7
18 F-E	6: 4:13.5	6: 4:12.8	-351.2	-1.2	167.8	701.3	805.1	119.4
19 F-W	6: 6:28.5	6: 6:27.8	-13.2	-0.1	124.3	769.7	823.3	110.8
20 F-E	6: 8:34.5	6: 8:33.8	208.3	0.7	162.7	749.0	810.9	112.5
21 F-W	6:11:49.5	6:11:48.8	32.2	0.2	73.7	725.9	777.9	111.1
22 F-E	6:14: 2.5	6:14: 1.6	9.0	0.0	107.1	706.9	1076.0	138.9
23 F-W	6:16:47.5	6:16:46.7	3.7	0.0	77.6	833.9	871.	107.0
24 F-E	6:19: 8.5	6:19: 7.7	-125.3	-0.7	103.2	782.7	923.	122.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATF
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT AN
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RAN

BEST DOCUMENT AVAILABLE

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TABLE C2-9 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
DEC 13,1980

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-W	6:26:34.5	6:26:33.8	35.5	0.1	143.0	669.3	795.6	122.7
26 F-E	6:29:10.0	6:29: 9.2	-80.7	-0.3	176.3	819.7	862.3	108.1
27 F-W	6:31:43.0	6:31:42.3	-48.7	-0.2	149.5	743.1	805.9	112.8
28 F-E	6:33:59.5	6:33:58.8	-29.5	-0.1	177.9	775.4	849.1	114.0
29 F-W	6:36:51.5	6:36:50.9	-44.3	-0.3	95.2	706.8	711.0	99.7
30 F-E	6:38:48.0	6:38:47.3	74.2	0.3	122.8	775.9	790.7	101.1
31 F-W	6:41:35.5	6:41:34.8	-244.7	-1.5	95.4	726.7	740.0	100.9
32 F-E	6:43:41.5	6:43:40.8	232.0	1.1	119.3	711.7	840.7	122.2
33 DEP	7:21:50.5	7:21:49.8	1203.7	7.8	86.3	777.4	853.0	65.7
34 ARR	7:24:40.5	7:24:39.9	-823.2	-7.5	62.1	702.9	718.7	80.5
35 DEP	7:28:50.5	7:28:49.8	1958.3	13.3	82.1	730.4	810.8	64.3
36 ARR	7:31:34.0	7:31:33.4	-531.5	-4.9	61.3	681.1	681.7	92.5
37 DEP	7:33:56.0	7:33:55.3	1746.0	11.6	84.0	747.6	789.2	71.3
39 DEP	7:38:48.0	7:38:47.3	1750.5	11.5	85.1	714.1	758.5	70.3
40 ARR	7:41:33.0	7:41:32.4	-711.2	-6.3	63.1	666.9	681.2	100.9
41 DEP	7:46: 7.0	7:46: 6.3	1738.7	11.3	85.8	708.6	747.1	70.1
42 ARR	7:49:12.5	7:49:11.9	-601.2	-5.3	63.7	639.2	704.1	102.2
43 DEP	7:51:49.0	7:51:48.3	1714.0	11.6	82.4	720.8	764.9	70.4

REC. TIME: TIME PNLTM WAS RECORDED, RAD. TIME: TIME PNLTM WAS RADIATED
R/C: AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG: CLIMB OR DESCENT ANGLE
GS: GROUND SPEED, CPA: CLOSEST POINT OF APPROACH
SR: SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG: ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C2-9 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 23,1980
S76
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
DEC 13,1980

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
44 ARR	7:54:53.0	7:54:52.4	-682.5	-6.2	61.6	665.1	665.3	88.6
45 F-E	8: 0:16.0	8: 0:14.9	-330.8	-1.2	151.3	1129.9	1200.9	109.8
46 F-W	8: 2:59.5	8: 2:58.3	125.5	0.5	137.7	1141.4	1334.6	121.2
47 F-E	8: 5:15.5	8: 5:14.4	253.8	0.9	151.4	1146.5	1264.9	115.0
48 F-W	8: 8:28.5	8: 8:27.2	-179.7	-0.7	139.4	1158.7	1430.0	125.9
49 F-E	8:10:36.5	8:10:35.8	-163.7	-0.7	136.3	720.8	816.3	118.0
50 F-W	8:13:29.5	8:13:28.8	-50.2	-0.2	115.9	666.3	738.9	115.6
51 F-E	8:16: 1.5	8:16: 0.8	125.8	0.5	131.2	748.0	748.2	88.6
52 F-W	8:19:13.5	8:19:12.8	-178.8	-0.9	117.4	741.4	859.0	120.3
53 DEP	8:22:19.0	8:22:18.3	1781.0	12.0	82.4	727.4	750.3	75.8
54 ARR	8:25:50.5	8:25:49.9	-604.8	-5.4	63.3	647.2	673.7	106.1
55 DEP	8:28:25.5	8:28:24.8	1418.2	10.3	77.4	723.6	793.8	65.7
56 ARR	8:41: 7.0	8:41: 6.5	-541.7	-4.9	63.0	623.1	627.8	97.0
57 F-E	8:45:35.0	8:45:34.3	-12.3	-0.0	157.2	776.1	841.8	112.8
58 F-W	8:48:30.5	8:48:29.8	-176.7	-0.7	138.4	717.2	859.2	123.4
59 F-E	8:50:40.0	8:50:39.3	-294.5	-1.1	153.0	727.7	832.2	119.0
60 F-W	8:53:28.5	8:53:27.8	373.2	1.6	135.6	760.6	826.5	113.0
61 F-E	8:57:59.5	8:57:58.8	-90.0	-0.5	100.6	728.6	783.9	111.7
62 F-W	9: 0:58.5	9: 0:57.8	-125.3	-0.8	87.4	714.8	740.9	105.3
63 F-E	9: 7:40.0	9: 7:39.3	58.0	0.3	100.8	792.8	834.0	108.1
64 F-W	9:10:13.5	9:10:12.7	-92.0	-0.6	88.0	727.8	884.4	124.6
65 F-E	9:13:46.0	9:13:45.3	419.5	1.4	165.1	752.5	798.3	109.5
66 F-W	9:16:13.0	9:16:12.1	19.0	0.1	155.6	747.2	1053.8	134.8
67 F-E	9:18:36.0	9:12:35.3	347.3	1.2	166.8	732.1	845.3	120.0
68 F-W	9:21: 5.0	9:21: 4.2	36.0	0.1	155.5	721.6	968.0	131.8
69 ARR	9:26:30.0	9:26:29.4	-731.8	-5.9	70.2	648.1	653.9	97.7
70 ARR	9:30:42.0	9:30:41.5	-544.0	-4.2	72.9	611.8	612.9	93.5

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

Sub-Appendix C3 Summary
A-109 June 24, 1980
Flight Path Tracking Plots and Position Data

1. FLIGHT PATH TRACKING PLOTS

Event No.	Plot Fig. No.	Operation		
2	C3-1	1000 Ft. LFO	130 kts	Target Speed
3	"	"		"
4	"	"		"
5	C3-2	1500 Ft. LFO		
6	"	"		"
11	"	"		"
12	"	"		"
7	C3-3	700 Ft. LFO		
8	"	"		"
13	"	"		"
14	"	"		"
9	C3-4	300 Ft. LFO		
10	"	"		"
15	"	"		"
16	"	"		"
17	C3-5	500 Ft. LFO	130 kts	Target Speed
18	"	"	130 kts	"
19	"	"	130 kts	"
21	"	"	87 kts	Target Speed
22	"	"	87 kts	"
23	C3-6	Takeoff		
25	"	"		
27	"	"		
29	"	"		
31	"	"		
33	"	"		

Event No.	Plot Fig. No.	Operation		
24	C3-7			
26	"	Approach		
28	"	"		
30	"	"		
32	"	"		
34	"	"		
35	C3-8	Takeoff		
37	"	"		
39	"	"		
41	"	"		
36	C3-9	Approach		
38	"	"		
40	"	"		
64	"	"		
42	C3-10	1000 Ft. LFO	0.9 V_{NE}	Target Speed
43	"	"		
44	"	"		
45	"	"		
46	C3-11	500 Ft. LFO	87 kt	Target Speed
47	"	"	87 kt	"
48	"	"	145 kt	"
49	"	"	145 kt	"
50	"	"	145 kt	"
51	"	"	102 kt	"
52	C3-12	500 Ft. LFO	102 kt	Target Speed
53	"	"	102 kt	"
54	"	"	116 kt	"
55	"	"	116 kt	"
56	"	"	102 kt	"
57	"	"	116 kt	"

Event No.	Plot Fig. No	Operation		
58	C3-13	500 Ft. LFO	116 kt	Target Speed
59	"	"	145 kt	"
60	"	"	145 kt	"
61	"	"	145 kt	"
62	"	"	130 kt	"
63	"	"	130 kt	"

2. POSITION DATA TABLES

Table No.	Microphone
C3-1	Mic. 1, Centerline Center, 4 ft.
C3-2	Mic. 2, Centerline West, 4 ft.
C3-3	Mic. 3, Centerline East, 4 ft.
C3-4	Mic. 4, Sideline North, 4 ft.
C3-5	Mic. 5, Sideline South, 4 ft.
C3-6	Mic. 6, Sideline North, 4 ft.
C3-7	Mic. 1G, Centerline Center, Ground
C3-8	Mic. 1H, Centerline Center, 33 ft.
C3-9	Mic. 5G, Sideline South, Ground

FIGURE C3-1

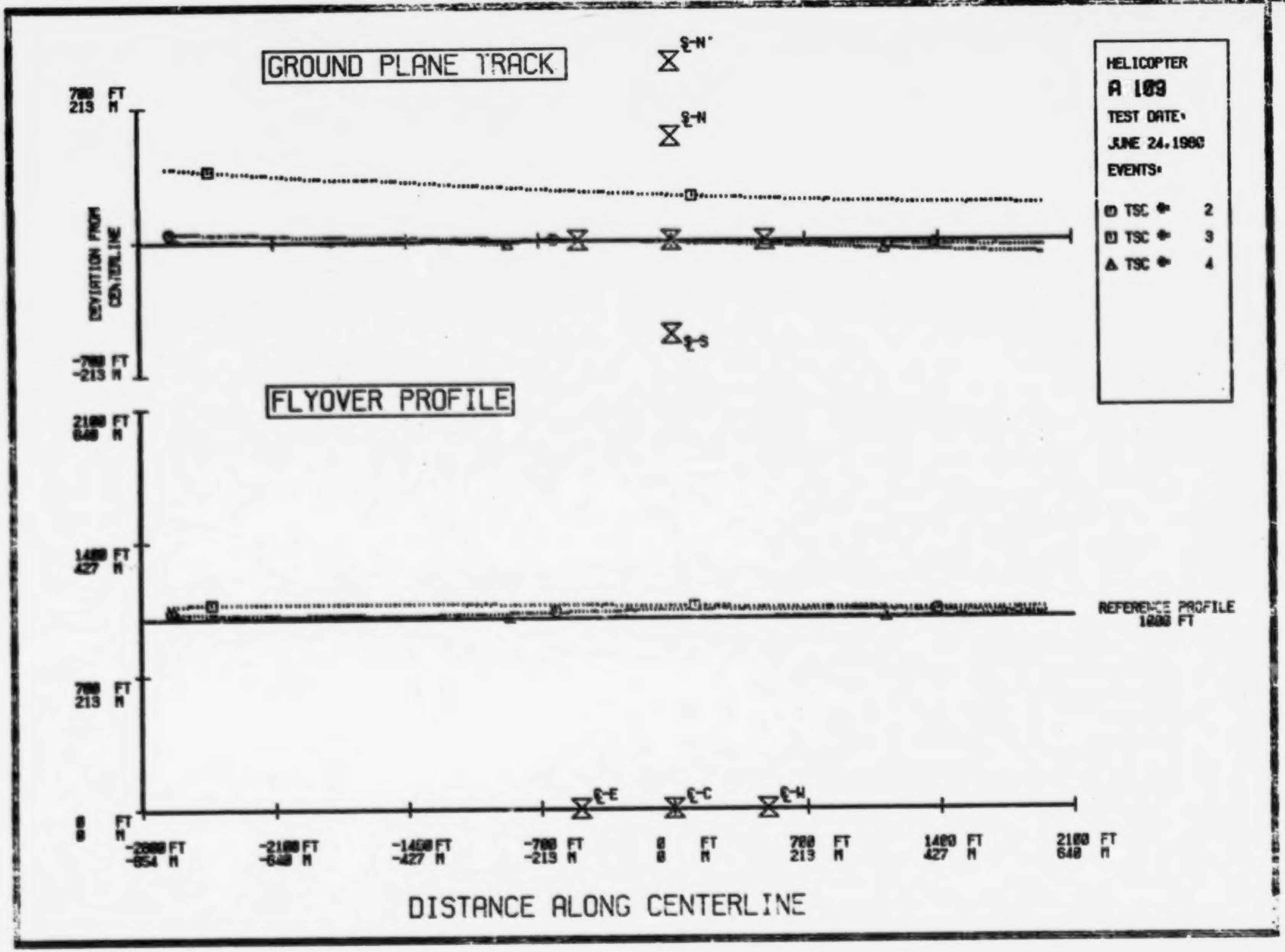

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
1000 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
A 103
TEST DATE:
JUNE 24, 1980
EVENTS:
TSC # 2
TSC # 3
TSC # 4

FIGURE C3-2

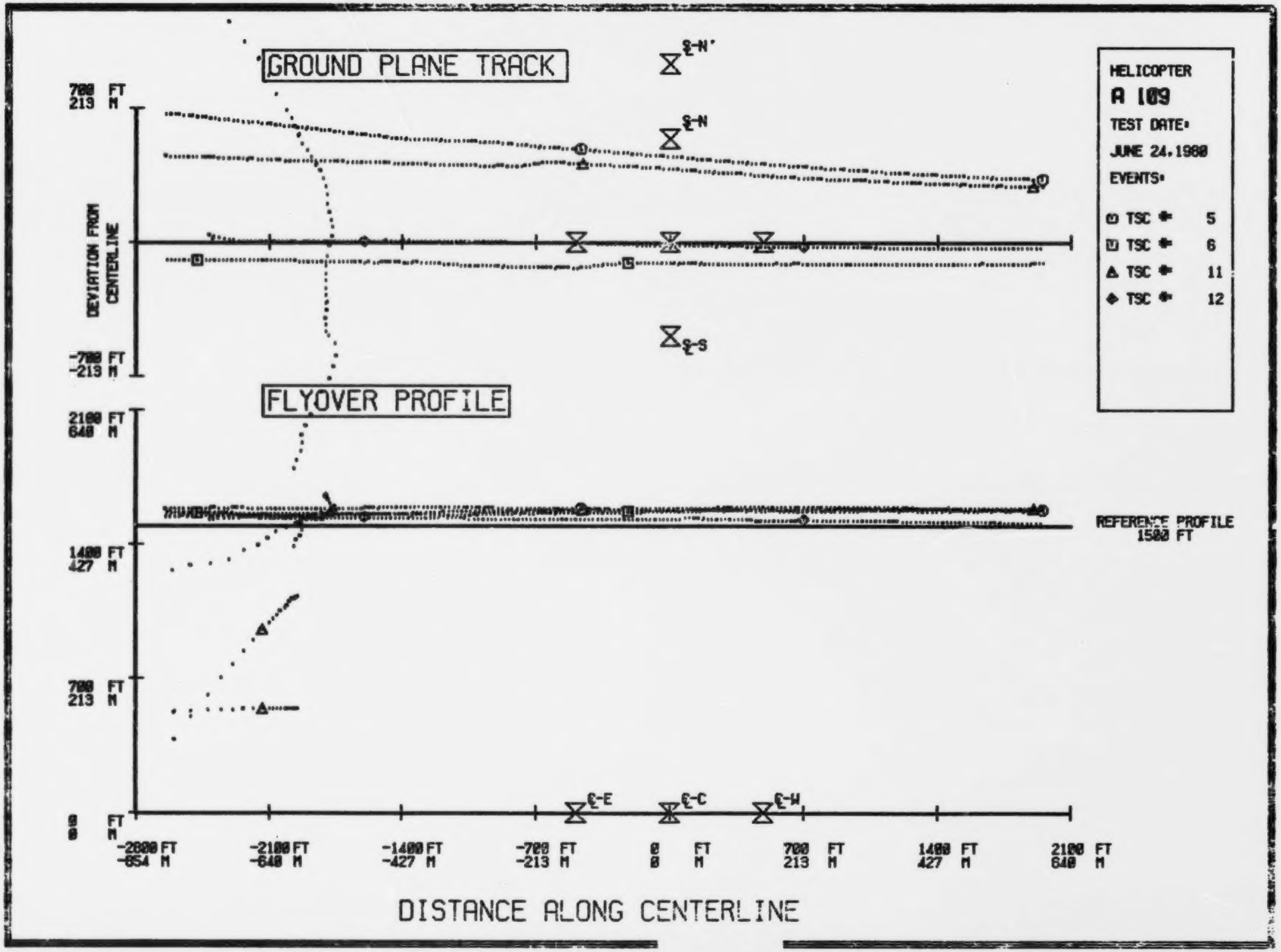

GROUND PLANE TRACK
FLYOVER PROFILE
700 FT 213 M
-700 FT -213 M
DEVIATION FROM CENTERLINE
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE 1500 FT
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
A 109
TEST DATE:
JUNE 24, 1980
EVENTS:
⊙ TSC # 5
⊡ TSC # 6
△ TSC # 11
◆ TSC # 12

FIGURE C3-3

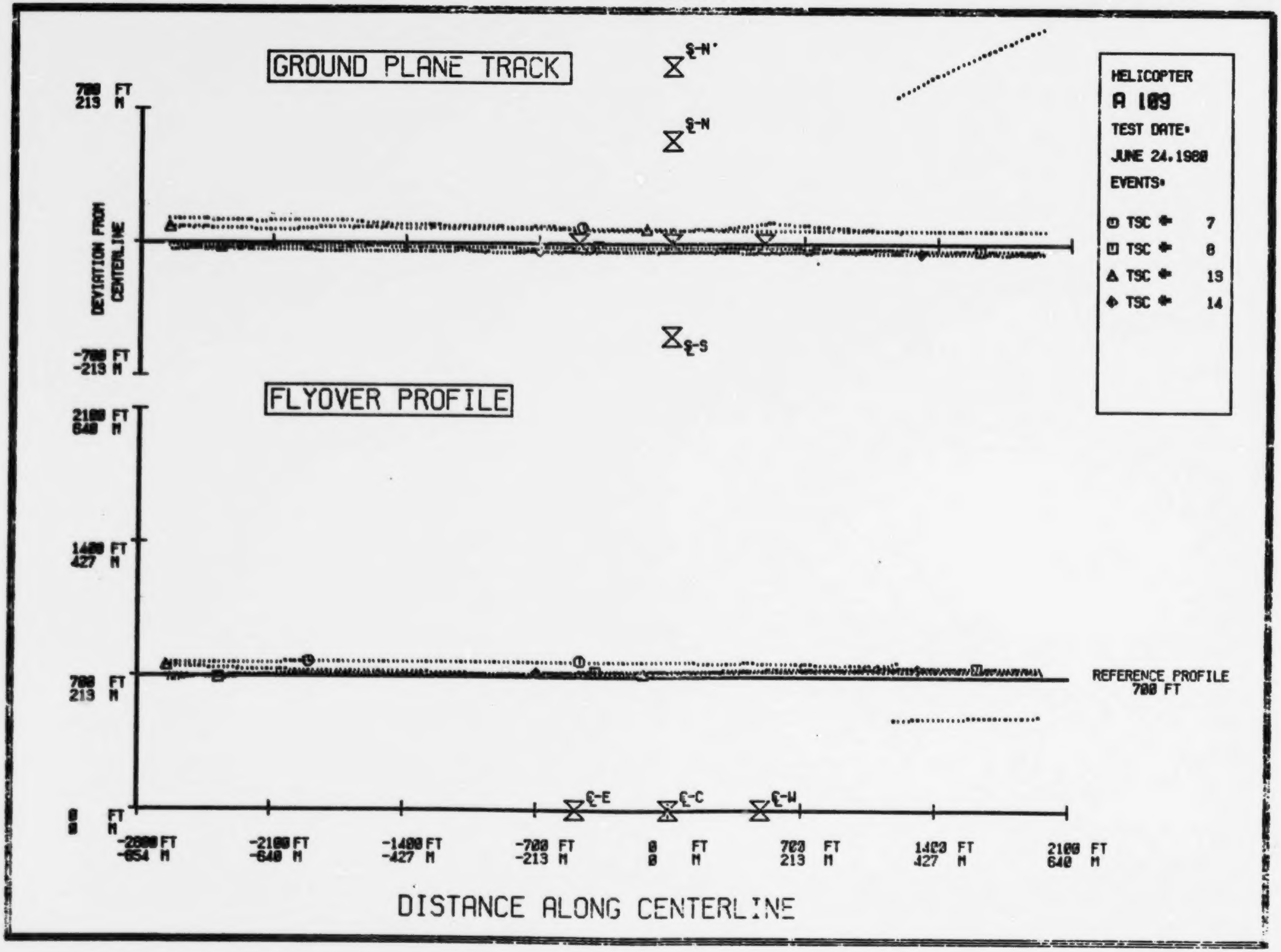
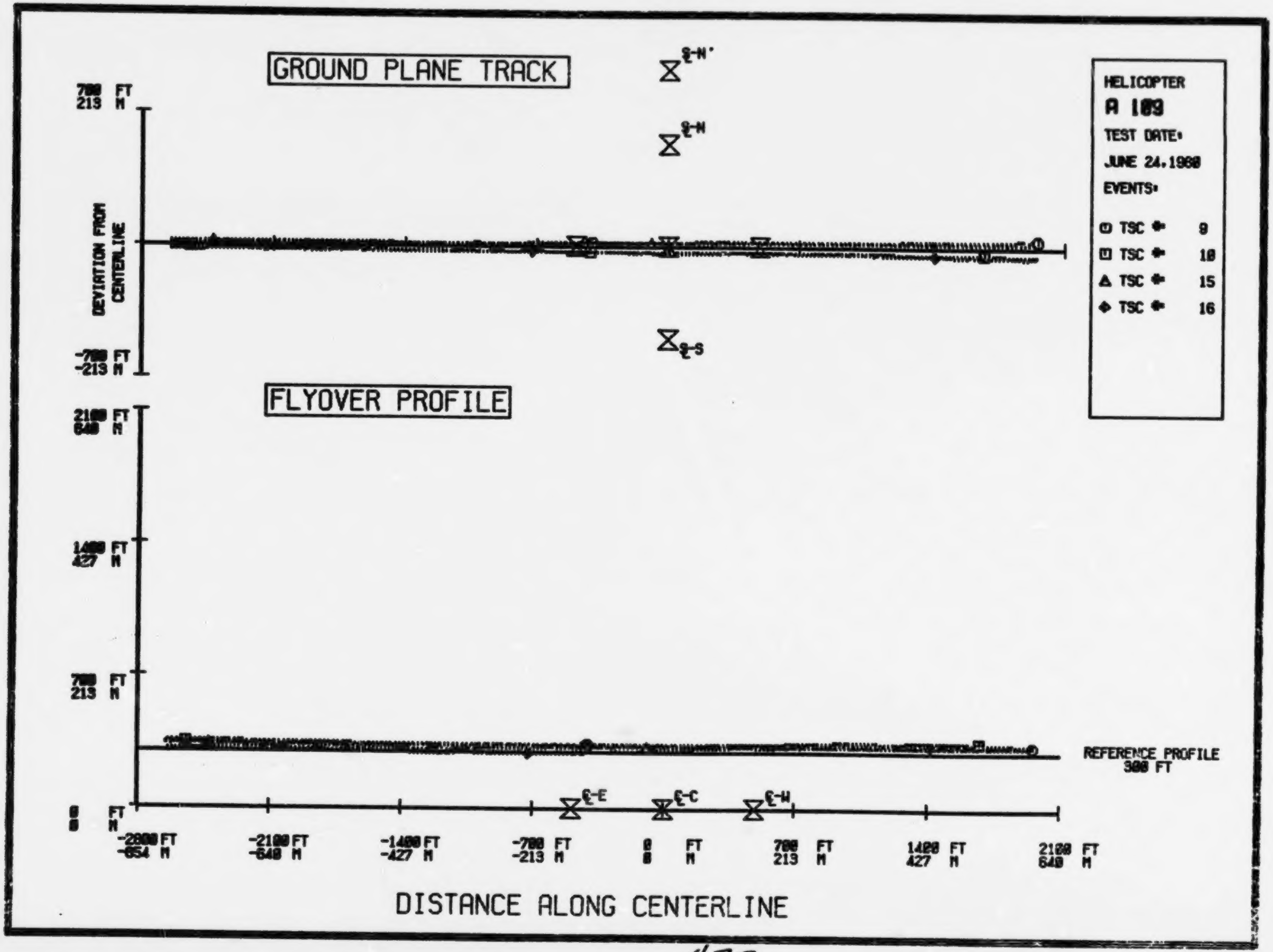

GROUND PLANE TRACK
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
℄-N'
℄-N
℄-S
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
700 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
A 109
TEST DATE:
JUNE 24,1980
EVENTS:
⊙ TSC # 7
⊡ TSC # 8
▲ TSC # 13
◆ TSC # 14

FIGURE C3-4



BEST DOCUMENT AVAILABLE

FIGURE C3-5

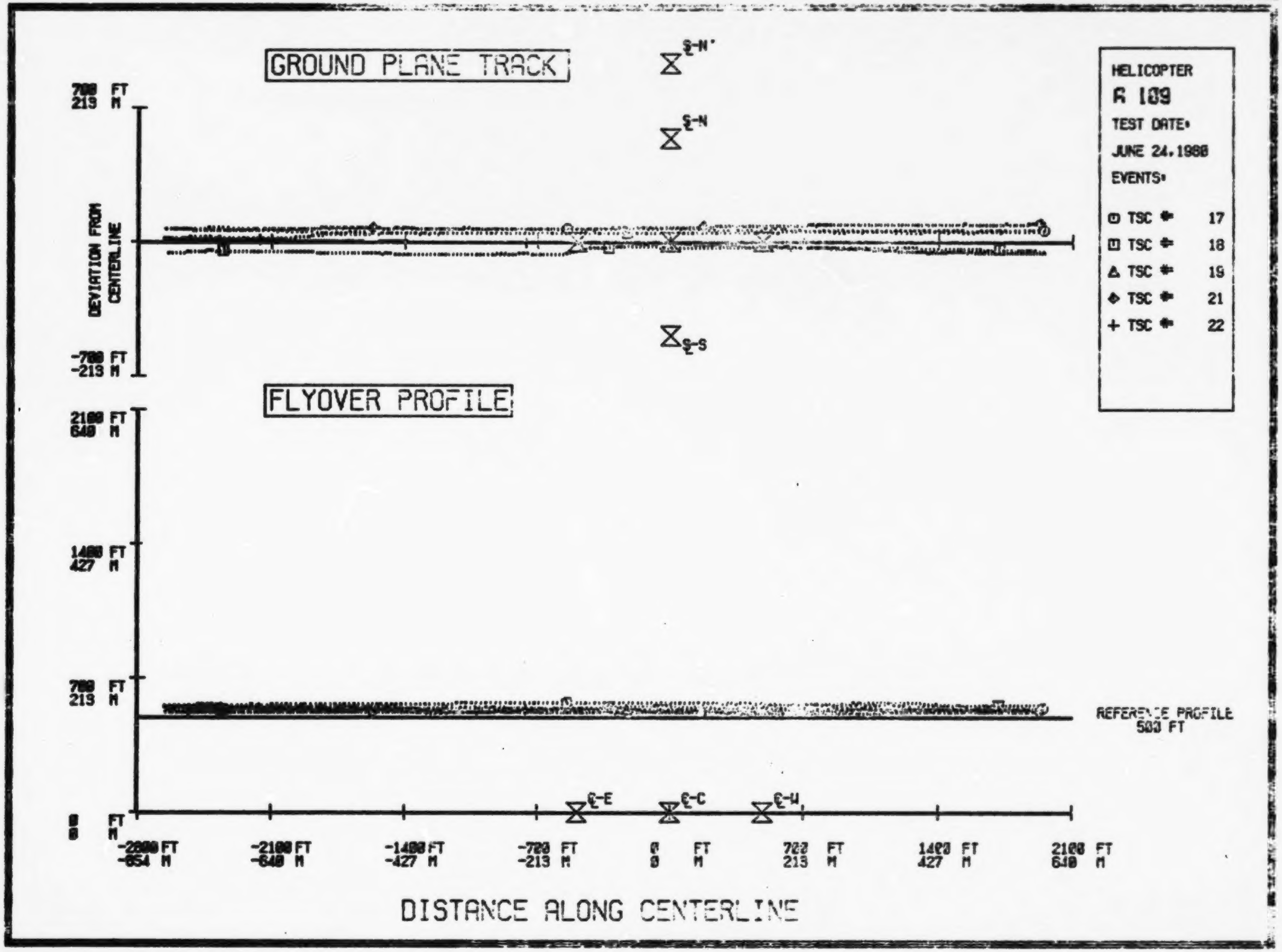
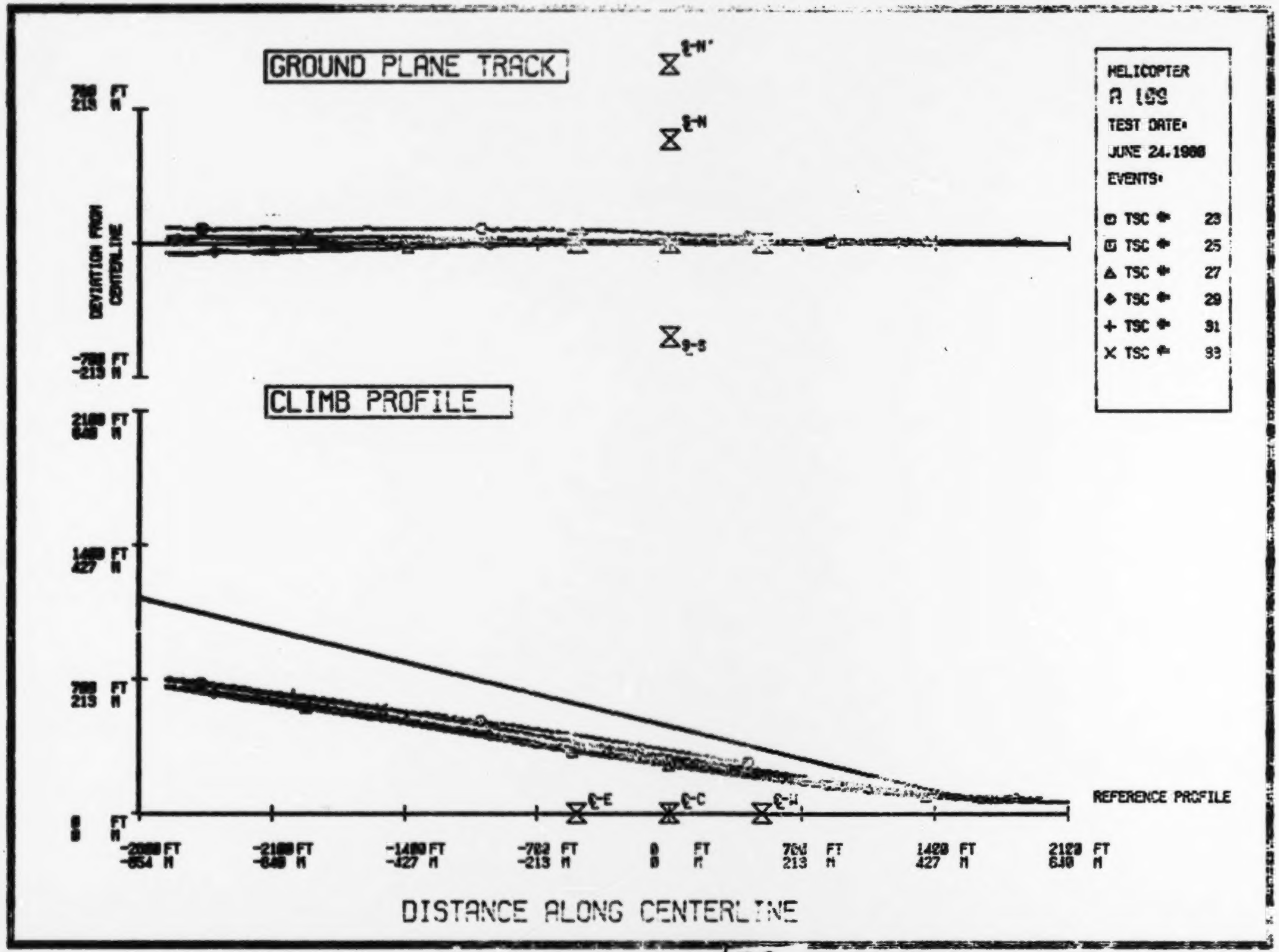
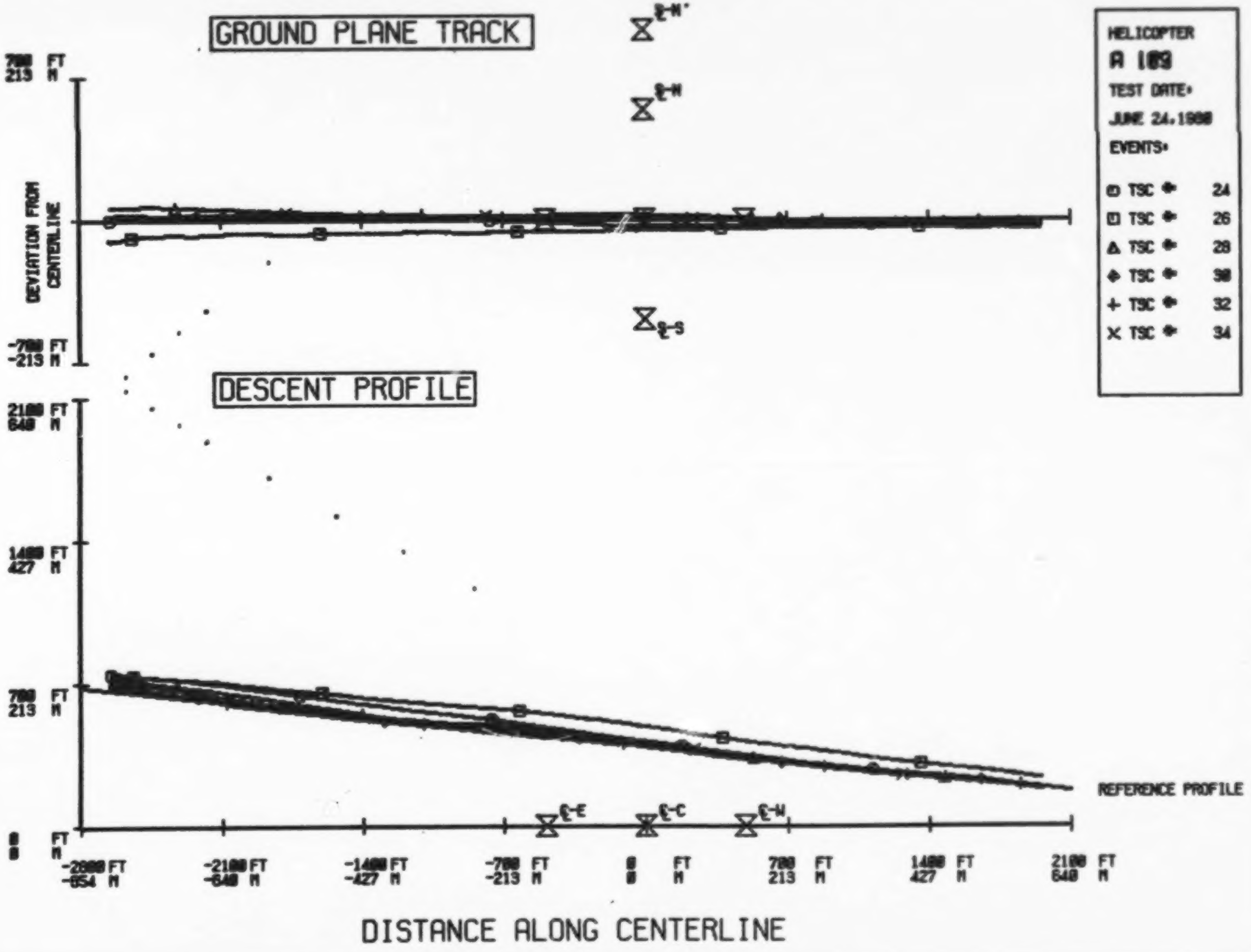

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
HELICOPTER
A 109
TEST DATE:
JUNE 24, 1980
EVENTS:
○ TSC # 17
□ TSC # 18
△ TSC # 19
◇ TSC # 21
+ TSC # 22
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
500 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C3-6



BEST DOCUMENT AVAILABLE

FIGURE C3-7



BEST DOCUMENT AVAILABLE

FIGURE C3-8

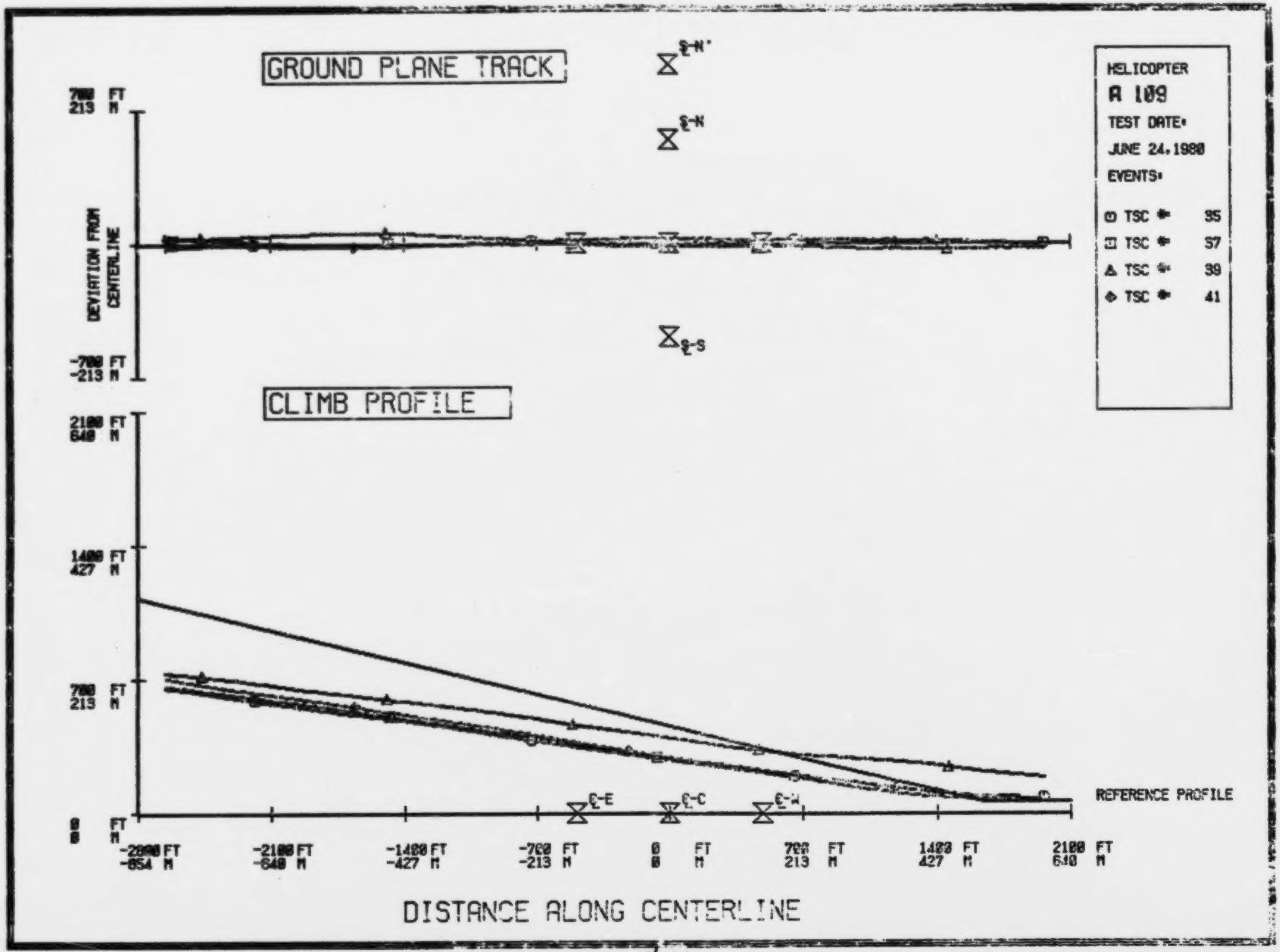

GROUND PLANE TRACK
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
℄-N'
℄-N
℄-S
CLIMB PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
℄-E
℄-C
℄-W
REFERENCE PROFILE
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
A 109
TEST DATE:
JUNE 24,1980
EVENTS:
⊡ TSC # 35
⊞ TSC # 37
△ TSC # 39
◈ TSC # 41

FIGURE C3-9

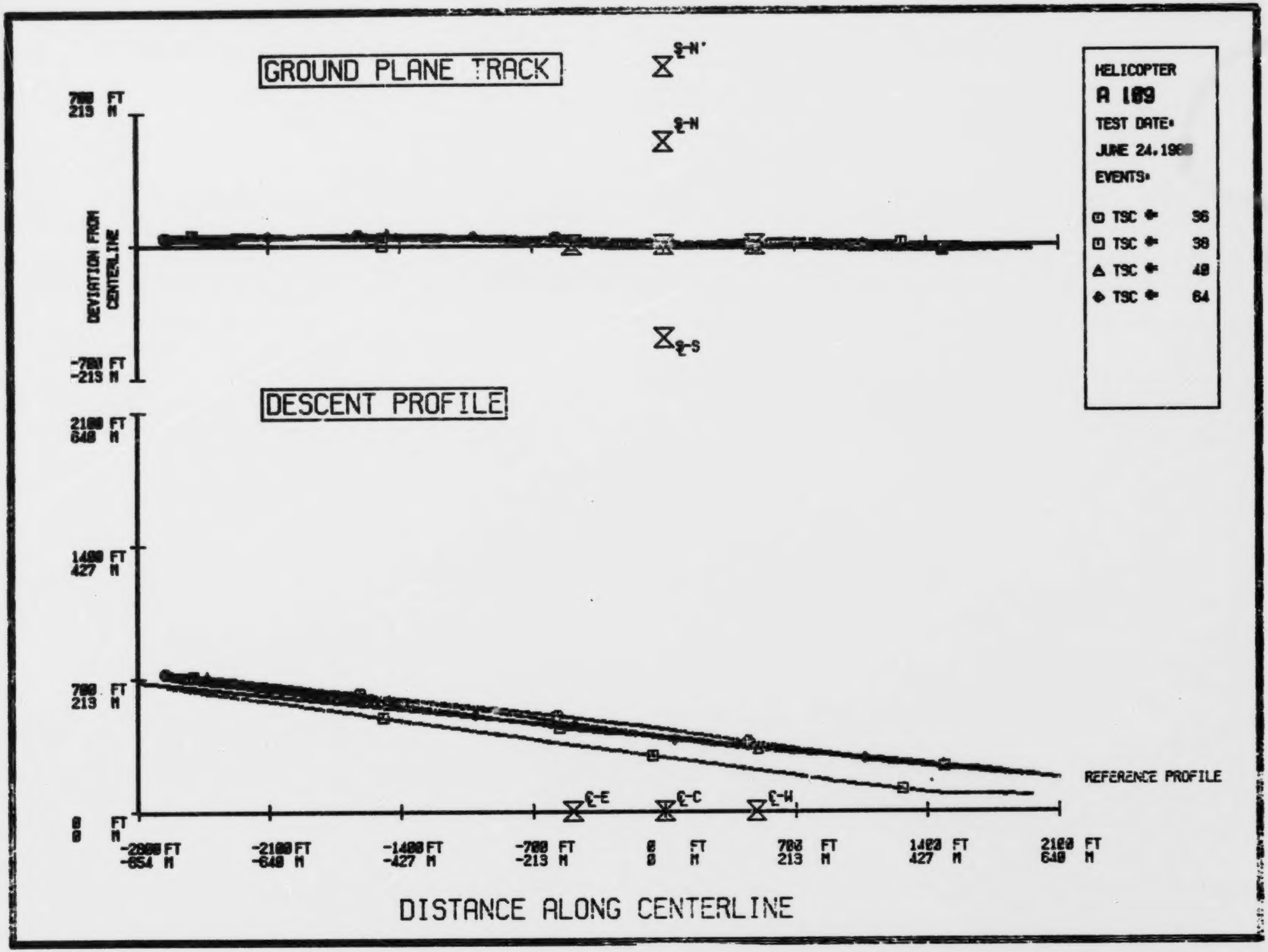

GROUND PLANE TRACK
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
℄-N'
℄-N
℄-S
DESCENT PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
℄-E
℄-C
℄-W
REFERENCE PROFILE
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
A 109
TEST DATE:
JUNE 24.1980
EVENTS:
⊡ TSC # 36
□ TSC # 38
△ TSC # 40
◆ TSC # 64

FIGURE C3-10

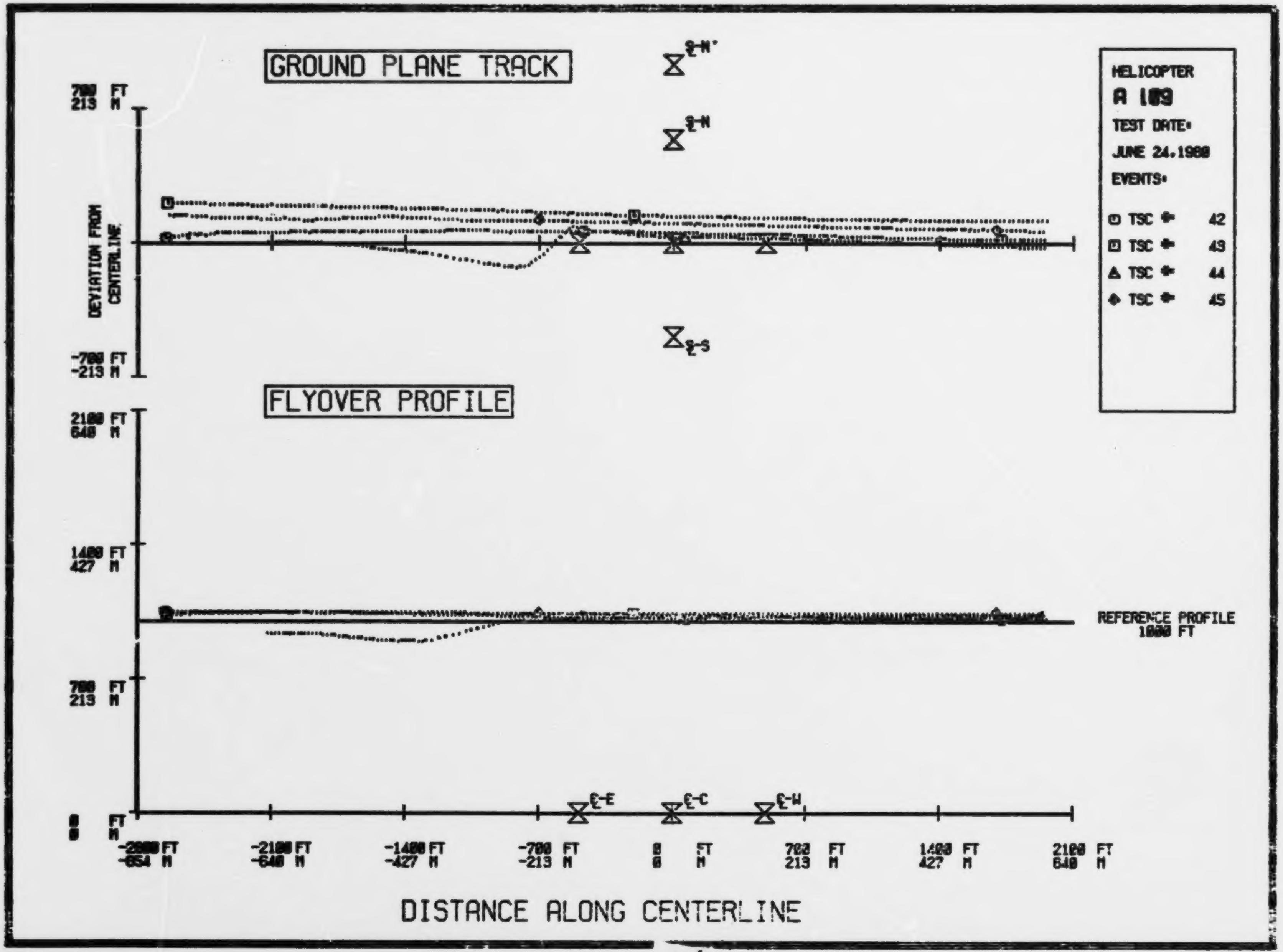

GROUND PLANE TRACK
FLYOVER PROFILE
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE 1000 FT
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
A 109
TEST DATE:
JUNE 24,1980
EVENTS:
TSC # 42
TSC # 43
TSC # 44
TSC # 45

FIGURE C3-11

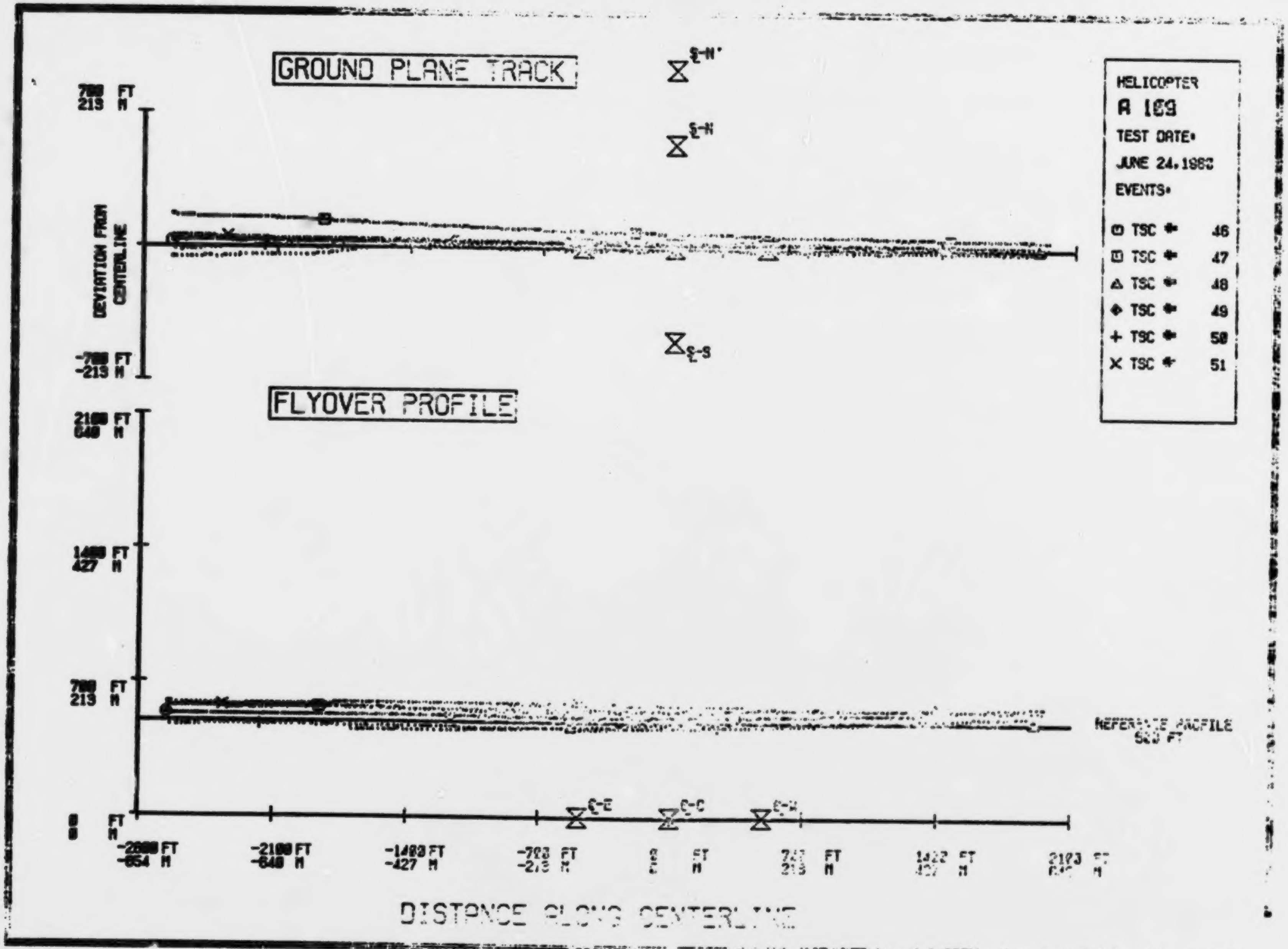
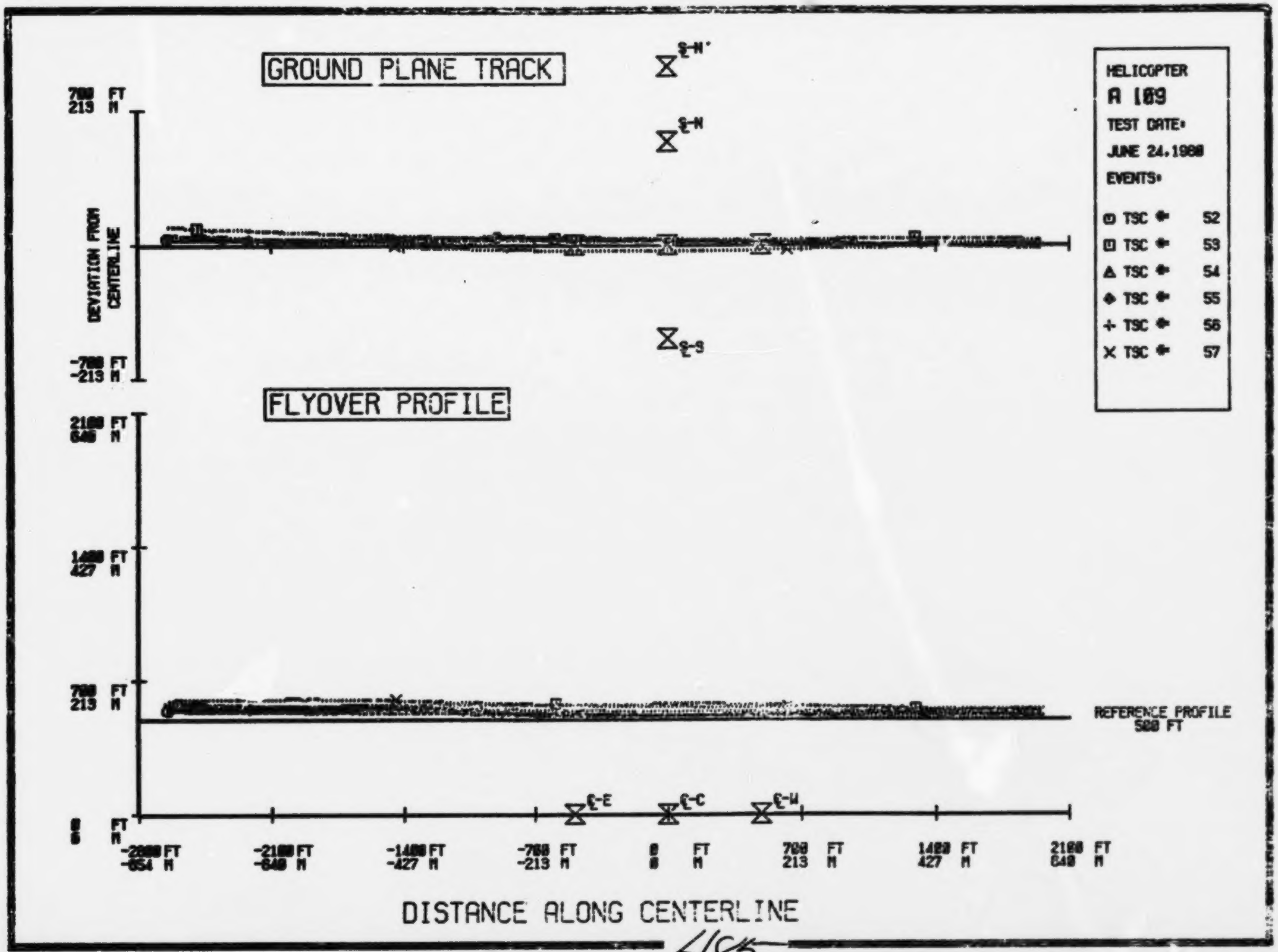

GROUND PLANE TRACK
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
℄-N'
℄-N
℄-S
HELICOPTER
A 109
TEST DATE:
JUNE 24, 1983
EVENTS:
○ TSC # 46
□ TSC # 47
△ TSC # 48
◆ TSC # 49
+ TSC # 50
× TSC # 51
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
500 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C3-12



BEST DOCUMENT AVAILABLE

FIGURE C3-13

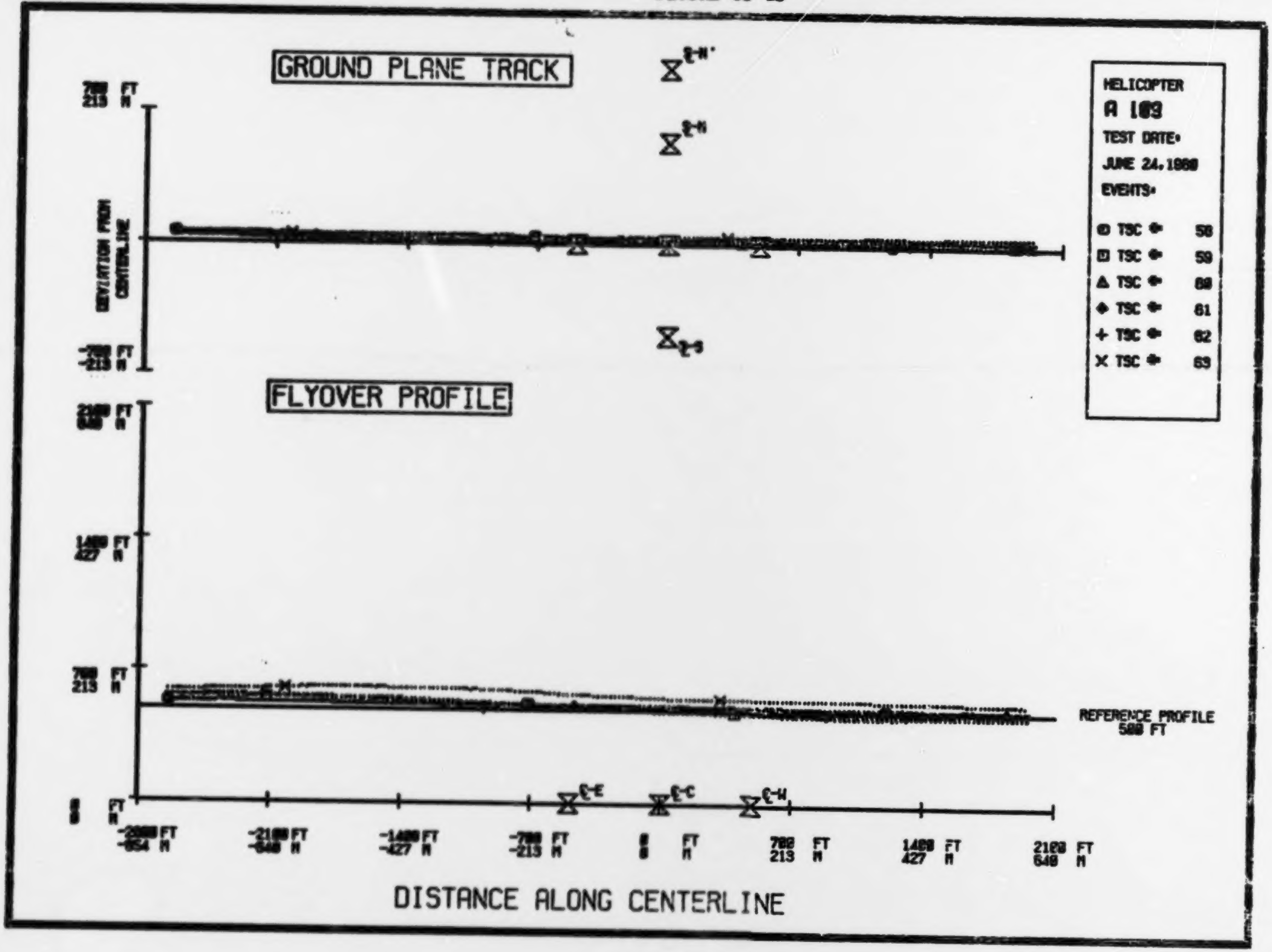

GROUND PLANE TRACK
FLYOVER PROFILE
HELICOPTER
A 109
TEST DATE:
JUNE 24, 1980
EVENTS:
⊖ TSC # 58
⊡ TSC # 59
△ TSC # 60
◆ TSC # 61
+ TSC # 62
× TSC # 63
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE 500 FT
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE

TABLE C3-1

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC $ 1 CENTERLINE CENTER, 4 FT
****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
2 F-W	6:17:49.0	6:17:47.4	159.0	0.7	120.1	1036.4	1818.0	145.2
3 F-E	6:21: 3.0	6:21: 1.4	135.2	0.5	153.2	1083.4	1847.6	144.1
4 F-W	6:23:40.5	6:23:39.5	8.2	0.0	118.0	996.7	1083.0	113.0
5 F-E	6:26:32.5	6:26:30.9	64.0	0.3	144.2	1637.6	1848.2	117.6
6 F-W	6:29: 8.5	6:29: 7.0	205.7	0.9	132.1	1574.2	1731.5	114.6
8 F-W	6:34:13.5	6:34:12.8	113.0	0.5	119.1	721.8	801.7	115.8
9 F-E	6:36:31.5	6:36:31.0	-61.2	-0.2	140.0	327.5	528.0	140.3
10 F-W	6:38:26.0	6:38:25.6	218.5	1.0	125.8	232.1	502.4	138.6
11 F-E	6:41: 0.0	6:40:57.1	69.8	0.3	141.1	1630.1	3275.6	150.2
13 F-E	6:47: 0.0	6:46:58.0	68.5	0.3	149.2	716.1	2253.7	161.5
14 F-W	6:49:33.0	6:49:31.9	207.8	1.0	119.7	723.3	1266.9	145.2
15 F-E	6:51:52.0	6:51:51.0	-20.7	-0.1	140.2	365.3	1104.7	162.9
16 F-W	6:53:59.5	6:53:59.2	435.0	1.9	126.9	309.7	358.4	120.2
17 F-E	6:56:17.0	6:56:15.5	247.7	0.9	147.6	570.4	1718.5	160.6
18 F-W	6:58:39.5	6:58:38.5	59.2	0.3	119.4	550.5	1083.4	149.5
19 F-E	7: 2:24.0	7: 2:23.3	-27.0	-0.1	146.4	529.1	842.4	140.3
21 F-E	7:13:36.0	7:13:34.3	-23.7	-0.1	104.7	527.3	1914.7	164.0
22 F-W	7:16:28.5	7:16:28.0	-105.2	-0.7	82.5	529.5	596.0	117.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-1 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
MAR 12,1981

****

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
24	ARR	7:48:46.0	7:48:45.6	-763.0	-7.8	54.8	408.4	478.9	121.1
25	DEP	7:52:57.5	7:52:57.3	971.8	6.7	81.7	253.1	275.1	113.1
26	ARR	7:55:18.0	7:55:17.5	-796.3	-7.6	59.3	481.5	561.0	120.9
27	DEP	7:58:15.0	7:58:14.8	1148.8	7.8	83.1	240.7	272.2	117.8
28	ARR	8: 0:37.0	8: 0:36.6	-801.3	-7.7	55.4	392.8	456.9	120.7
29	DEP	8: 2:41.0	8: 2:40.7	1114.0	7.5	83.9	267.0	309.7	120.4
31	DEP	8: 7:27.5	8: 7:27.2	1220.8	8.1	85.0	282.7	326.3	120.0
32	ARR	8: 9:48.5	8: 9:48.1	-522.3	-5.1	58.2	395.7	485.8	127.4
33	DEP	8:11:48.0	8:11:47.7	1268.7	8.7	81.7	291.5	323.5	115.7
34	ARR	8:14:11.0	8:14:10.6	-773.0	-7.1	60.9	392.6	405.5	104.5
35	DEP	8:17:46.0	8:17:45.7	1090.5	7.5	81.3	272.1	331.7	124.9
36	ARR	8:19:52.5	8:19:51.9	-743.3	-6.8	61.5	423.0	650.7	139.5
37	DEP	8:21:55.5	8:21:55.2	1182.5	8.2	81.0	278.9	305.9	114.3
38	ARR	8:24:14.0	8:24:13.4	-619.0	-5.8	59.9	388.0	638.0	142.5
40	ARR	8:28:17.5	8:28:17.1	-798.5	-7.8	57.7	336.2	475.1	125.6
41	DEP	8:30:15.0	8:30:14.7	1177.2	7.9	84.3	224.5	351.4	125.9
42	F-W	8:32:40.0	8:32:38.6	-248.5	-1.1	130.1	1010.7	1644.3	142.1
43	F-E	8:35:15.0	8:35:12.6	134.0	0.5	144.0	1040.8	2679.4	157.1
44	F-W	8:37:27.5	8:37:26.1	1524.7	6.1	141.6	1010.9	1588.5	140.4
45	F-E	8:39:53.5	8:39:51.3	-79.7	-0.3	141.9	1042.7	2568.6	155.4
46	F-W	8:42:38.5	8:42:36.0	19.2	0.1	89.2	518.0	576.7	116.1
47	F-E	8:44:55.0	8:44:54.5	-53.5	-0.3	97.6	561.9	609.5	112.6

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-2

POSITION DATA
HELICOPTER NOISE MEASUREMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC # 2 CENTERLINE WEST, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
2 F-W	6:17:56.0	6:17:55.0	24.8	0.1	118.9	1037.8	1139.7	114.4
3 F-E	6:21: 0.0	6:20:58.1	-3.5	-0.0	153.9	1074.7	2150.9	150.0
4 F-W	6:23:43.0	6:23:42.0	60.7	0.3	117.6	997.9	1083.3	112.9
5 F-E	6:26:31.0	6:26:29.4	24.0	0.1	143.4	1625.3	1779.6	114.0
6 F-W	6:29: 6.0	6:29: 3.8	85.5	0.4	134.4	1581.3	2499.7	140.8
8 F-W	6:34:13.5	6:34:12.5	113.0	0.5	119.1	732.2	1157.1	140.7
9 F-E	6:36:28.5	6:36:27.8	56.7	0.2	140.6	339.8	751.2	153.1
10 F-W	6:38:29.0	6:38:28.6	229.3	1.0	124.5	339.1	405.4	123.2
11 F-E	6:40:59.5	6:40:56.9	41.3	0.2	141.1	1627.5	2889.5	145.7
13 F-E	6:46:56.5	6:46:54.1	156.2	0.6	148.5	724.5	2717.9	164.5
14 F-W	6:49:38.5	6:49:37.8	99.8	0.5	119.4	726.1	802.4	115.2
15 F-E	6:51:50.5	6:51:49.7	-95.7	-0.4	140.0	322.2	941.8	150.0
16 F-W	6:54: 0.5	6:53:60.0	331.0	1.5	126.5	322.0	599.6	147.5
17 F-E	6:56:17.5	6:56:16.6	272.7	1.0	147.5	568.7	1019.3	146.1
18 F-W	6:58:45.0	6:58:44.5	145.5	0.7	120.7	549.2	586.6	110.6
19 F-E	7: 2:19.0	7: 2:17.5	-10.5	-0.0	146.3	540.7	1559.2	161.0
21 F-E	7:13:33.0	7:13:31.3	-73.0	-0.4	104.3	520.3	1959.0	164.6
22 F-W	7:16:32.0	7:16:31.5	-56.8	-0.4	82.8	527.4	588.7	116.4

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-2 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
MAR 12,1981

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
24	ARR	7:48:51.0	7:48:50.6	-747.2	-7.6	55.3	342.5	432.8	127.7
25	DEP	7:52:54.0	7:52:53.8	1034.8	7.4	78.7	194.2	214.6	115.2
26	ARR	7:55:23.5	7:55:23.1	-816.0	-7.8	58.6	409.5	459.6	117.0
27	DEP	7:58:11.5	7:58:11.3	1079.3	7.5	81.2	178.4	212.1	122.8
28	ARR	8: 0:42.5	8: 0:42.2	-821.2	-8.0	58.0	327.7	369.9	117.6
29	DEP	8: 2:38.0	8: 2:37.8	1076.5	7.5	80.8	203.6	216.8	110.1
30	ARR	8: 5:26.0	8: 5:25.7	-687.7	-6.6	58.7	323.7	391.1	124.1
31	DEP	8: 7:24.5	8: 7:24.3	1175.2	8.0	82.9	214.2	229.3	110.9
32	ARR	8: 9:51.0	8: 9:50.4	-503.0	-4.9	59.0	338.5	649.5	148.6
33	DEP	8:11:45.0	8:11:44.8	1178.7	8.3	80.2	218.9	227.4	105.7
34	ARR	8:14:14.0	8:14:13.6	-726.3	-6.6	61.6	336.7	432.8	128.9
35	DEP	8:17:43.5	8:17:43.3	1108.5	7.8	79.5	207.3	209.0	97.2
36	ARR	8:20: 0.5	8:20: 0.2	-855.0	-8.1	59.1	351.8	378.9	111.8
37	DEP	8:21:52.0	8:21:51.8	1213.5	8.5	79.7	209.3	235.6	117.3
38	ARR	8:24:21.5	8:24:21.2	-676.5	-6.3	60.9	336.3	403.2	123.5
40	ARR	8:28:23.0	8:28:22.7	-753.3	-7.3	58.1	321.4	381.7	122.6
41	DEP	8:30:12.0	8:30:11.8	1088.3	7.4	82.5	217.1	252.1	120.5
42	F-W	8:32:42.0	8:32:40.5	-252.5	-1.1	131.7	1005.1	1688.4	143.5
43	F-E	8:35:12.5	8:35:10.0	208.2	0.8	143.6	1031.0	2808.4	158.5
44	F-W	8:37:29.5	8:37:28.1	592.3	2.6	130.4	1023.5	1609.3	140.5
45	F-E	8:39:53.5	8:39:51.8	-79.7	-0.3	141.9	1040.0	1976.1	148.2
46	F-W	8:42:40.0	8:42:39.5	133.8	0.8	89.2	524.0	564.1	111.7
47	F-E	8:44:50.5	8:44:49.8	83.0	0.5	98.1	564.7	748.2	131.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-2 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM
TEST DATE: JUNE 24,1980
A109
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
48 F-W	8:53:26.5	8:53:25.1	372.0	1.5	138.2	492.8	1560.8	161.6
49 F-E	8:55:38.5	8:55:36.6	263.5	1.0	153.1	554.1	2138.5	165.0
50 F-W	8:57:57.5	8:57:56.0	-101.3	-0.4	143.2	472.4	1665.9	163.5
51 F-E	9: 0:13.0	9: 0:12.5	225.2	1.1	112.9	570.6	595.8	106.7
52 F-W	9: 2:34.0	9: 2:33.5	151.5	0.8	104.6	521.0	586.0	117.2
53 F-E	9: 5:53.5	9: 5:53.0	293.2	1.5	111.4	567.5	628.3	115.4
54 F-W	9: 8: 7.5	9: 8: 7.0	-66.8	-0.3	122.7	511.2	569.6	116.2
55 F-E	9:10:23.5	9:10:22.9	29.3	0.1	122.9	533.8	631.6	122.3
56 F-W	9:12:39.5	9:12:39.0	26.3	0.1	105.7	513.3	573.3	116.5
57 F-E	9:14:45.0	9:14:44.2	107.3	0.5	123.2	554.3	919.5	142.9
58 F-W	9:17:11.0	9:17:10.5	-34.8	-0.2	114.2	511.6	567.2	115.6
59 F-E	9:19:22.5	9:19:21.4	-81.2	-0.3	150.0	477.3	1305.4	158.6
60 F-W	9:21:35.5	9:21:34.5	-102.2	-0.4	149.8	515.6	1193.2	154.4
61 F-E	9:23:33.0	9:23:32.1	-136.8	-0.5	150.3	483.2	1037.7	152.2
63 F-E	9:27:48.5	9:27:47.6	156.7	0.6	139.3	555.2	976.1	145.3
64 ARR	9:30: 3.0	9:30: 2.6	-620.3	-5.8	60.4	326.6	424.2	129.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-3

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC # 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
2 F-W	6:17:47.0	6:17:45.5	60.8	0.3	120.1	1029.0	1739.0	143.7
3 F-E	6:21: 1.0	6:20:58.4	54.2	0.2	153.6	1093.6	2981.7	158.5
4 F-W	6:23:35.0	6:23:33.7	-53.2	-0.3	117.2	996.2	1472.3	137.4
5 F-E	6:26:27.0	6:26:23.9	-40.2	-0.2	144.0	1654.2	3457.2	151.4
6 F-W	6:29: 3.0	6:29: 1.0	-99.2	-0.4	135.5	1565.1	2234.5	135.5
8 F-W	6:34: 4.0	6:34: 2.1	247.7	1.2	116.3	719.0	2100.5	160.0
9 F-E	6:36:33.5	6:36:33.0	-37.7	-0.2	140.5	334.7	547.9	142.4
10 F-W	6:38:22.0	6:38:21.2	42.2	0.2	126.1	321.0	870.7	158.4
11 F-E	6:41: 1.5	6:40:58.5	108.3	0.4	140.6	1627.0	3420.6	151.6
13 F-E	6:47: 5.0	6:47: 3.8	-249.7	-0.9	149.4	710.2	1376.8	148.9
14 F-W	6:49:31.0	6:49:30.0	192.2	0.9	120.1	714.9	1181.4	142.8
15 F-E	6:51:56.5	6:51:56.1	110.3	0.5	138.7	327.6	481.5	137.1
16 F-W	6:53:56.0	6:53:55.5	51.8	0.2	127.8	292.1	576.1	149.5
17 F-E	6:56:21.5	6:56:20.6	67.5	0.3	147.9	572.9	1018.7	145.8
18 F-W	6:58:38.5	6:58:37.8	1.0	0.0	120.8	539.7	811.8	138.3
19 F-E	7: 2:23.5	7: 2:22.2	-15.2	-0.1	146.4	537.3	1505.7	159.1
21 F-E	7:13:39.5	7:13:37.9	-60.2	-0.3	103.5	521.6	1772.8	162.9
22 F-W	7:16:26.0	7:16:25.5	112.0	0.2	82.3	536.6	543.9	99.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-3 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

FAA/AEE 120
MAR 12,1981

TEST DATE: JUNE 24,1980
A109
MIC # 3 CENTERLINE EAST, 4 FT

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
24 ARR	7:48:44.0	7:48:43.6	-814.5	-8.3	55.0	475.2	477.5	84.4
25 DEP	7:53: 0.5	7:53: 0.2	1095.5	7.3	83.9	312.3	361.9	120.4
26 ARR	7:55:16.5	7:55:16.0	-743.3	-7.1	58.7	546.7	549.4	84.3
27 DEP	7:58:17.5	7:58:17.1	1401.0	9.4	83.3	319.0	412.9	129.4
28 ARR	8: 0:33.5	8: 0:33.1	-758.8	-7.4	57.8	458.9	468.1	101.4
29 DEP	8: 2:44.0	8: 2:43.7	1197.5	7.9	85.0	333.9	399.9	123.4
30 ARR	8: 5:16.0	8: 5:15.6	-151.0	-4.4	58.0	441.5	500.2	118.0
31 DEP	8: 7:31.0	8: 7:30.7	1474.8	9.8	84.4	357.2	381.1	110.4
32 ARR	8: 9:44.5	8: 9:44.1	-577.8	-5.5	59.1	428.8	474.3	115.3
33 DEP	8:11:52.5	8:11:52.2	1341.3	9.1	82.6	368.5	368.7	91.9
34 ARR	8:14: 4.5	8:14: 4.0	-581.0	-5.5	60.0	447.4	522.3	121.1
35 DEP	8:17:49.5	8:17:49.2	1189.2	8.0	83.3	340.2	389.3	119.2
36 ARR	8:19:52.0	8:19:51.6	-750.8	-6.9	61.3	485.8	428.4	95.9
37 DEP	8:22: 0.0	8:21:59.7	1290.5	8.7	83.0	351.7	352.1	87.3
38 ARR	8:24:11.5	8:24:11.1	-813.8	-7.6	60.2	426.3	514.0	124.0
40 ARR	8:28:14.5	8:28:14.1	-869.7	-8.4	58.0	452.1	460.0	100.7
41 DEP	8:30:18.0	8:30:17.6	1409.0	9.3	85.0	360.3	444.4	125.8
42 F-W	8:32:37.0	8:32:35.4	-214.3	-0.9	130.4	1030.6	1813.6	145.8
43 F-E	8:35:16.5	8:35:14.0	88.5	0.3	144.3	1048.5	2831.2	158.3
45 F-E	8:39:56.5	8:39:54.5	-62.3	-0.2	142.1	1044.3	2254.2	152.4
46 F-W	8:42:34.0	8:42:33.5	-63.2	-0.4	89.9	517.1	534.6	104.7
47 F-E	8:44:58.5	8:44:58.0	117.8	0.7	97.8	569.2	581.4	101.8

REC. TIME: TIME PNLTM WAS RECORDED, RAD. TIME: TIME PNLTM WAS RADIATED
R/C: AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG: CLIMB OR DESCENT ANGLE
GS: GROUND SPEED, CPA: CLOSEST POINT OF APPROACH
SR: SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG: ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-3 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC $ 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
49 F-E	8:55:46.5	8:55:45.7	-106.5	-0.4	150.0	546.9	897.6	142.5
50 F-W	8:57:55.5	8:57:54.6	-150.3	-0.6	145.3	459.8	1069.0	154.5
51 F-E	9: 0:18.0	9: 0:17.5	55.5	0.3	111.3	586.0	627.9	111.0
52 F-W	9: 2:29.0	9: 2:28.5	-136.2	-0.7	104.6	511.7	545.0	110.1
53 F-E	9: 5:59.5	9: 5:59.0	-48.7	-0.2	111.4	571.0	586.1	103.0
55 F-E	9:10:29.0	9:10:28.5	164.8	0.8	123.2	538.1	565.9	108.0
56 F-W	9:12:34.5	9:12:34.0	-265.0	-1.4	106.0	523.9	551.4	108.2
57 F-E	9:14:49.5	9:14:48.6	131.0	0.6	122.7	568.1	971.0	144.2
58 F-W	9:17: 6.0	9:17: 5.5	-55.0	-0.3	112.9	521.9	562.5	111.9
59 F-E	9:19:26.5	9:19:25.4	348.8	1.3	150.9	501.1	1267.3	156.7
60 F-W	9:21:30.0	9:21:28.5	-132.0	-0.5	149.0	519.1	1663.7	161.8
61 F-E	9:23:37.0	9:23:36.1	424.8	1.6	149.7	515.5	1007.8	149.2
63 F-E	9:27:53.0	9:27:52.2	329.3	1.3	139.1	577.9	908.6	140.5
64 ARR	9:29:55.5	9:29:55.1	-686.2	-6.2	62.8	443.3	453.1	101.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-4

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC # 4 SIDELINE NORTH, 4 FT

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
2 F-W	6:17:44.5	6:17:42.0	-164.7	-0.8	120.3	1170.2	2844.9	155.7
3 F-E	6:21: 5.0	6:21: 3.8	134.2	0.5	152.6	1089.5	1410.0	129.4
4 F-W	6:23:32.0	6:23:29.7	6.7	0.0	118.2	1115.6	2624.1	154.8
5 F-E	6:26:30.5	6:26:28.6	-1.7	-0.0	143.5	1576.8	2136.6	132.4
6 F-W	6:29: 0.0	6:28:57.0	-162.5	-0.7	134.1	1680.8	3447.3	150.8
8 F-W	6:34: 9.5	6:34: 8.1	100.7	0.5	119.4	886.5	1560.3	145.4
9 F-E	6:36:33.0	6:36:32.5	-47.0	-0.2	139.6	579.0	582.3	96.1
10 F-W	6:38:27.5	6:38:27.0	215.5	1.0	124.5	620.3	626.3	98.0
11 F-E	6:41: 4.5	6:41: 2.5	73.7	0.3	139.6	1588.0	2235.0	134.7
13 F-E	6:47: 5.0	6:47: 4.1	-249.7	-0.9	149.4	827.9	1028.5	126.4
14 F-W	6:49:24.5	6:49:21.6	121.8	0.6	117.3	900.5	3245.0	163.9
15 F-E	6:51:48.5	6:51:46.6	-145.2	-0.6	140.6	574.8	2192.0	164.8
16 F-W	6:53:55.5	6:53:54.3	-40.3	-0.2	127.8	605.2	1385.3	154.1
17 F-E	6:56:16.0	6:56:14.2	267.2	1.0	147.9	708.0	2076.3	160.1
18 F-W	6:58:36.0	6:58:34.3	0.7	0.0	121.2	756.9	1971.2	157.4
19 F-E	7: 2:24.5	7: 2:23.7	-34.0	-0.1	145.8	696.0	875.4	127.3
21 F-E	7:13:37.5	7:13:36.0	-62.5	-0.3	104.3	667.1	1671.7	156.5
22 F-W	7:16:27.5	7:16:26.8	-57.8	-0.4	83.0	728.5	846.0	120.5

REC. TIME: TIME PNLTM WAS RECORDED, RAD. TIME: TIME PNLTM WAS RADIATED
R/C: AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG: CLIMB OR DESCENT ANGLE
GS: GROUND SPEED, CPA: CLOSEST POINT OF APPROACH
SR: SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG: ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C3-4 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC # 4 SIDELINE NORTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
24 ARR	7:48:43.5	7:48:42.7	-815.5	-8.3	55.1	698.7	860.5	125.7
25 DEP	7:52:56.5	7:52:56.0	973.8	6.8	80.8	546.1	618.5	118.0
26 ARR	7:55:18.5	7:55:17.8	-820.2	-7.8	59.4	723.8	769.7	109.9
27 DEP	7:58:14.5	7:58:14.0	1105.3	7.5	83.1	540.9	589.0	113.3
28 ARR	8: 0:40.5	8: 0:40.0	-759.3	-7.4	58.0	611.7	622.2	79.4
29 DEP	8: 2:40.5	8: 2:40.0	1113.8	7.5	83.1	557.0	625.5	117.1
30 ARR	8: 5:24.0	8: 5:23.5	-793.0	-7.5	59.4	621.2	622.3	86.6
31 DEP	8: 7:26.0	8: 7:25.4	1223.5	8.2	84.0	561.7	701.0	126.7
32 ARR	8: 9:51.0	8: 9:50.5	-503.0	-4.9	58.0	621.7	623.8	94.8
33 DEP	8:11:47.0	8:11:46.4	1232.2	8.5	81.7	557.4	648.1	120.7
34 ARR	8:14:13.0	8:14:12.4	-751.0	-6.9	61.3	626.5	634.6	80.9
35 DEP	8:17:45.0	8:17:44.4	1083.7	7.5	81.0	540.5	653.8	124.2
36 ARR	8:19:52.5	8:19:51.8	-742.3	-6.8	61.5	639.9	803.0	127.2
37 DEP	8:21:54.5	8:21:53.9	1169.7	8.1	80.9	565.0	634.1	117.0
38 ARR	8:24:13.0	8:24:12.2	-739.2	-7.0	59.8	620.4	880.4	135.2
40 ARR	8:28:16.0	8:28:15.3	-797.0	-7.7	58.3	636.8	773.8	124.6
41 DEP	8:30:14.5	8:30:13.9	1177.8	7.9	83.8	568.3	648.5	118.8
43 F-E	8:35:20.5	8:35:19.3	186.0	0.7	144.1	1089.6	1386.7	128.2
45 F-E	8:39:58.0	8:39:56.7	-11.5	-0.0	142.5	1107.6	1488.7	131.9
46 F-W	8:42:35.5	8:42:34.8	13.2	0.1	89.3	703.4	825.7	121.6
47 F-E	8:44:50.0	8:44:48.8	87.0	0.5	98.5	693.9	1359.2	149.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-4 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC # 4 SIDELINE NORTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
49 F-E	8:55:39.5	8:55:37.3	234.3	0.9	152.9	748.4	2495.9	162.6
50 F-W	8:57:57.0	8:57:55.8	-138.5	-0.5	143.3	682.4	1332.0	149.2
51 F-E	9: 0:12.0	9: 0:10.9	135.2	0.7	112.5	748.4	1216.0	142.0
53 F-E	9: 5:55.0	9: 5:54.2	158.5	0.8	111.1	740.8	908.9	125.4
55 F-E	9:10:25.0	9:10:24.2	53.8	0.2	122.9	724.5	922.3	128.2
56 F-W	9:12:36.0	9:12:35.3	-214.8	-1.1	105.9	699.2	821.2	121.6
57 F-E	9:14:48.0	9:14:47.1	105.2	0.5	123.2	764.7	976.0	128.4
58 F-W	9:17: 7.5	9:17: 6.8	-119.7	-0.6	112.8	651.6	830.0	123.6
59 F-E	9:19:27.0	9:19:26.3	351.7	1.3	150.8	685.1	913.9	122.7
60 F-W	9:21:30.5	9:21:28.6	-77.3	-0.3	148.6	714.8	2172.7	160.8
61 F-E	9:23:36.5	9:23:35.8	358.2	1.4	142.9	677.7	816.4	123.3
63 F-E	9:27:53.0	9:27:52.4	329.3	1.3	139.1	718.9	740.7	103.9
64 ARR	9:29:59.0	9:29:58.4	-851.7	-7.8	62.0	614.8	656.5	110.5

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C3-5

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC # 5 SIDELINE SOUTH, 4 FT

FAA/AEE 120
MAR 12,1981

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EVENT #	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
2 F-W	6:17:51.5	6:17:50.2	269.5	1.3	119.4	1145.2	1476.4	129.1
3 F-E	6:21: 1.0	6:20:58.8	54.2	0.2	153.6	1282.2	2517.7	149.4
4 F-W	6:23:38.0	6:23:36.7	-1.3	-0.0	116.4	1107.2	1478.4	131.5
5 F-E	6:26:22.5	6:26:18.8	-166.5	-0.7	143.6	1832.6	4209.1	154.2
6 F-W	6:29: 8.5	6:29: 6.9	205.7	0.9	132.1	1617.2	1767.7	113.8
8 F-W	6:34:12.0	6:34:11.0	258.0	1.2	118.8	860.4	1102.6	128.7
9 F-E	6:36:29.0	6:36:27.8	20.8	0.1	140.4	613.9	1318.2	152.2
10 F-W	6:38:27.0	6:38:26.5	243.3	1.1	124.8	565.7	597.0	108.6
11 F-E	6:41: 2.5	6:41: 0.0	169.2	0.7	141.2	1809.4	2783.2	139.4
13 F-E	6:46:59.0	6:46:56.7	79.0	0.3	149.0	907.9	2630.0	159.8
14 F-W	6:49:34.5	6:49:33.5	165.0	0.8	119.5	848.2	1105.1	129.9
15 F-E	6:51:52.0	6:51:50.9	-20.7	-0.1	140.2	604.4	1241.8	150.9
16 F-W	6:53:58.5	6:53:57.9	347.3	1.5	127.5	556.4	725.6	129.9
17 F-E	6:56:18.5	6:56:17.2	259.5	1.0	147.6	796.0	1423.1	146.0
18 F-W	6:58:34.5	6:58:32.5	-53.3	-0.2	122.3	719.3	2289.5	161.7
19 F-E	7: 2:22.5	7: 2:21.3	87.0	0.3	146.7	760.7	1364.8	146.1
21 F-E	7:13:36.0	7:13:34.2	-23.7	-0.1	104.7	771.5	2016.0	157.5
22 F-W	7:16:30.5	7:16:29.9	-40.2	-0.3	82.8	716.8	716.8	89.8

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-5 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC # 5 SIDELINE SOUTH, 4 FT

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
24	ARR	7:48:48.0	7:48:47.5	-742.0	-7.6	55.0	617.1	622.5	97.5
25	DEP	7:52:58.0	7:52:57.5	960.5	6.6	82.1	560.4	565.0	97.4
26	ARR	7:55:11.5	7:55:10.5	-473.5	-4.6	53.2	651.2	1165.8	146.0
27	DEP	7:58:14.0	7:58:13.4	1086.7	7.4	82.8	554.4	638.8	119.8
28	ARR	8: 0:35.0	8: 0:34.3	-806.2	-7.8	58.2	647.0	797.7	125.8
29	DEP	8: 2:39.5	8: 2:38.9	1090.8	7.4	82.6	562.4	699.7	126.5
30	ARR	8: 5:16.0	8: 5:15.1	-451.0	-4.4	58.0	624.6	1006.4	141.6
31	DEP	8: 7:29.0	8: 7:28.5	1271.2	8.3	85.7	573.1	574.2	86.5
32	ARR	8: 9:46.5	8: 9:45.8	-530.8	-5.1	58.9	628.3	823.5	130.3
33	DEP	8:11:49.0	8:11:48.5	1270.3	3.7	81.9	586.1	586.6	92.5
34	ARR	8:14: 6.0	8:14: 5.2	-520.0	-4.9	60.1	632.3	910.9	136.0
35	DEP	8:17:47.0	8:17:46.5	1127.3	7.7	82.0	583.2	588.5	97.7
36	ARR	8:19:53.5	8:19:52.8	-762.8	-7.0	61.3	656.3	783.6	123.1
37	DEP	8:21:56.0	8:21:55.5	1213.7	8.4	81.3	566.1	574.8	100.0
38	ARR	8:24:14.5	8:24:13.8	-565.3	-5.3	59.7	632.4	795.0	127.3
40	ARR	8:28:21.0	8:28:20.5	-831.7	-8.0	58.3	613.8	616.3	84.9
41	DEP	8:30:16.5	8:30:16.0	1260.7	8.3	85.5	568.4	568.5	91.0
42	F-W	8:32:39.5	8:32:37.9	-272.3	-1.2	130.8	1147.5	1243.9	141.5
43	F-E	8:35: 8.0	8:35: 3.8	234.0	0.9	143.6	1210.9	4768.0	165.3
44	F-W	8:37:30.0	8:37:28.9	225.8	1.0	127.9	1137.4	1277.2	117.1
45	F-E	8:39:51.0	8:39:48.1	-102.0	-0.4	141.6	1196.2	3254.5	158.4
46	F-W	8:42:36.0	8:42:35.3	6.3	0.0	89.4	725.2	813.0	116.9
47	F-E	8:44:55.0	8:44:54.3	-53.8	-0.3	97.6	796.3	834.4	107.4

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-5 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC # 5 SIDELINE SOUTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
49 F-E	8:55:42.0	8:55:40.5	-25.7	-0.1	152.1	755.1	1732.6	154.2
50 F-W	8:57:55.5	8:57:54.0	-150.3	-0.6	145.3	669.5	1747.4	157.5
51 F-E	9: 0:15.0	9: 0:14.3	235.5	1.2	112.1	776.0	838.9	112.3
52 F-W	9: 2:29.5	9: 2:28.6	-71.8	-0.4	105.1	725.9	982.5	132.4
53 F-E	9: 5:56.0	9: 5:55.3	82.7	0.4	111.4	770.5	840.1	113.5
54 F-W	9: 8: 4.0	9: 8: 3.2	-151.2	-0.7	119.8	733.3	913.7	126.6
55 F-E	9:10:25.0	9:10:24.2	53.8	0.2	122.9	728.2	932.2	128.6
56 F-W	9:12:35.0	9:12:34.2	-225.5	-1.2	106.0	724.0	966.8	131.5
57 F-E	9:14:44.0	9:14:42.5	77.2	0.4	123.4	726.8	1753.1	155.5
58 F-W	9:17: 7.0	9:17: 6.2	-112.7	-0.6	113.0	731.0	938.5	128.8
59 F-E	9:19:25.0	9:19:23.9	225.5	0.8	150.4	698.9	1269.9	146.6
60 F-W	9:21:31.5	9:21:29.8	-90.5	-0.3	149.4	714.0	1894.4	157.9
61 F-E	9:23:33.0	9:23:31.5	-136.8	-0.5	150.3	718.1	1719.0	155.3
63 F-E	9:27:49.5	9:27:48.3	95.5	0.4	139.2	771.7	1379.4	146.0
64 ARR	9:30: 1.5	9:30: 1.0	-759.8	-7.0	60.9	623.0	624.3	86.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-6

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC # 6 SIDELINE NORTH, 4 FT

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
2 F-W	6:17:45.0	6:17:42.5	-123.2	-0.6	120.6	1396.1	2854.2	150.7
3 F-E	6:20:54.5	6:20:50.5	-157.5	-0.6	154.2	1267.6	4525.9	163.7
4 F-W	6:23:42.0	6:23:40.8	-17.0	-0.1	117.7	1370.1	1379.8	96.8
5 F-E	6:26:30.5	6:26:28.5	-1.7	-0.0	143.5	1648.9	2220.8	132.1
6 F-W	6:28:56.5	6:28:52.6	-115.2	-0.5	135.1	1882.4	4418.7	154.8
8 F-W	6:34:13.0	6:34:11.8	174.3	0.8	118.6	1196.1	1309.7	114.0
9 F-E	6:36:33.5	6:36:32.6	-37.7	-0.2	140.5	970.2	970.3	91.0
10 F-W	6:38:27.5	6:38:26.6	215.5	1.0	124.5	1019.0	1031.4	98.9
11 F-E	6:40:58.5	6:40:55.2	-70.5	-0.3	141.1	1675.8	3730.2	153.3
13 F-E	6:47: 5.0	6:47: 3.8	-249.7	-0.9	149.4	1117.2	1303.9	121.0
14 F-W	6:49:27.5	6:49:25.1	13.5	0.1	121.6	1215.1	2703.0	153.3
15 F-E	6:51:55.5	6:51:54.6	75.5	0.3	139.5	969.3	988.3	101.2
16 F-W	6:53:53.5	6:53:51.7	-241.0	-1.1	128.1	1008.0	2076.0	151.0
17 F-E	6:56:13.0	6:56:10.2	287.3	1.1	148.8	1032.9	3112.1	160.6
18 F-W	6:58:37.0	6:58:35.3	-22.7	-0.1	122.3	1105.3	1965.0	145.8
19 F-E	7: 2:25.0	7: 2:24.0	-60.7	-0.2	146.0	1032.9	1132.7	114.2
22 F-W	7:16:28.5	7:16:27.5	-105.2	-0.7	82.5	1078.3	1124.6	106.5

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-6 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC # 6 SIDELINE NORTH, 4 FT

FAA/AEE 120
MAR 12,1981

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
24 ARR	7:48:47.0	7:48:46.1	-741.7	-7.6	55.0	1042.4	1059.8	100.4
25 DEP	7:52:53.5	7:52:52.4	1025.7	7.4	78.2	957.0	1228.9	128.9
26 ARR	7:55:20.5	7:55:19.5	-910.3	-8.6	59.6	1092.3	1096.7	95.1
27 DEP	7:58:13.5	7:58:12.6	1079.7	7.4	82.1	954.2	1044.1	113.9
28 ARR	8: 0:37.5	8: 0:36.6	-777.0	-7.5	58.5	989.3	1013.1	102.4
29 DEP	8: 2:42.5	8: 2:41.7	1131.7	7.5	84.8	965.5	966.0	91.8
30 ARR	8: 5:26.5	8: 5:25.6	-654.8	-6.3	58.5	1004.4	1037.6	75.4
31 DEP	8: 7:27.0	8: 7:26.1	1200.3	7.9	85.4	966.6	1015.1	107.8
32 ARR	8: 9:45.5	8: 9:44.4	-541.0	-5.2	58.8	1003.5	1192.7	122.7
33 DEP	8:11:47.0	8:11:46.1	1232.2	8.5	81.7	959.6	1033.1	111.7
34 ARR	8:14:11.0	8:14:10.1	-773.0	-7.1	60.9	1007.0	1017.1	98.1
35 DEP	8:17:45.0	8:17:44.1	1083.7	7.5	81.0	946.3	1033.2	113.7
36 ARR	8:19:56.5	8:19:55.6	-877.7	-8.2	60.2	1011.0	1012.4	92.9
37 DEP	8:21:53.5	8:21:52.5	1196.8	8.4	80.3	971.2	1081.2	116.1
38 ARR	8:24: 7.0	8:24: 5.6	-903.2	-8.7	58.3	1000.7	1643.1	142.5
40 ARR	8:28:15.5	8:28:14.5	-814.8	-7.8	58.4	1021.3	1141.5	116.5
41 DEP	8:30:15.0	8:30:14.1	1177.8	7.9	84.3	973.5	1016.2	106.7
43 F-E	8:35:20.0	8:35:18.5	152.7	0.6	144.1	1299.3	1669.1	128.9
45 F-E	8:39:47.5	8:39:43.7	-2.0	-0.0	141.1	1306.7	4304.7	162.0
46 F-W	8:42:36.5	8:42:35.5	19.2	0.1	69.2	1051.5	1097.4	106.6
47 F-E	8:44:50.0	8:44:48.6	87.0	0.5	98.5	1018.8	1583.4	140.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-6 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC # 6 SIDELINE NORTH, 4 FT

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
49 F-E	8:55:37.0	8:55:34.0	278.0	1.0	150.9	1055.7	3397.2	161.9
50 F-W	8:57:53.0	8:57:50.7	-127.5	-0.5	151.6	1047.9	2660.3	156.8
51 F-E	9: 0:14.5	9: 0:13.5	240.2	1.2	112.5	1079.7	1179.7	113.8
52 F-W	9: 2:32.5	9: 2:31.6	137.5	0.7	105.0	1043.3	1048.5	95.7
53 F-E	9: 5:51.0	9: 5:49.4	347.0	1.8	111.7	1074.0	1776.5	142.8
55 F-E	9:10:24.5	9:10:23.4	34.7	0.2	123.1	1071.0	1301.7	124.6
56 F-W	9:12:37.5	9:12:36.6	-115.5	-0.6	105.9	1047.4	1064.2	100.2
57 F-E	9:14:48.5	9:14:47.4	54.3	0.2	123.0	1111.1	1236.1	116.0
58 F-W	9:17: 9.0	9:17: 8.1	-122.3	-0.6	113.6	1038.2	1058.2	101.2
59 F-E	9:19:27.5	9:19:26.5	360.8	1.4	149.7	1041.9	1107.7	109.8
60 F-W	9:21:31.5	9:21:29.7	-90.5	-0.3	149.4	1065.6	2064.3	148.9
61 F-E	9:23:35.5	9:23:34.3	230.8	0.9	150.2	1029.0	1314.8	128.5
63 F-E	9:27:52.0	9:27:51.0	188.0	0.8	139.8	1051.8	1169.2	115.9
64 ARR	9:30: 0.0	9:29:59.1	-829.5	-7.5	61.9	998.8	1009.6	98.4

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

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BEST DOCUMENT AVAILABLE

TABLE C3-7

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC #1G CENTERLINE CENTER, GROUND

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
2 F-W	6:17:55.0	6:17:54.1	108.0	0.5	118.4	1040.4	1053.1	98.9
3 F-E	6:21: 5.0	6:21: 3.8	134.2	0.5	152.6	1087.3	1396.5	128.9
4 F-W	6:23:36.5	6:23:35.0	-40.0	-0.2	116.1	1000.7	1651.7	142.7
5 F-E	6:26:31.0	6:26:29.2	24.0	0.1	143.4	1641.5	2077.6	127.8
6 F-W	6:29: 0.5	6:28:57.6	-177.0	-0.7	134.5	1578.2	3273.2	151.2
8 F-W	6:34:11.0	6:34:10.0	209.3	1.0	119.2	725.8	1154.1	141.0
9 F-E	6:36:31.5	6:36:31.0	-61.8	-0.2	149.0	341.5	532.4	140.1
10 F-W	6:38:26.0	6:38:25.6	218.5	1.0	125.8	336.1	506.5	138.4
11 F-E	6:41: 1.5	6:40:58.9	108.3	0.4	140.6	1633.9	2905.8	145.8
13 F-E	6:47: 4.0	6:47: 3.0	-111.3	-0.4	150.1	720.1	1142.0	140.9
14 F-W	6:49:34.0	6:49:33.0	127.5	0.6	119.9	727.3	1084.1	137.9
15 F-E	6:51:54.5	6:51:54.1	50.2	0.2	139.4	329.3	465.0	134.9
16 F-W	6:53:58.5	6:53:58.0	347.3	1.5	127.5	313.6	530.4	143.7
17 F-E	6:56:20.0	6:56:19.2	165.5	0.6	147.7	574.4	902.1	140.5
18 F-W	6:58:40.5	6:58:39.7	70.5	0.3	118.9	554.5	879.7	140.9
19 F-E	7: 2:24.0	7: 2:23.3	-27.0	-0.1	146.4	542.1	845.0	140.1
21 F-E	7:13:35.5	7:13:33.7	-45.7	-0.2	104.8	531.3	2017.0	164.7
22 F-W	7:16:28.5	7:16:28.0	-105.2	-0.7	82.5	533.5	599.6	117.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-7 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM
TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC #1G CENTERLINE CENTER, GROUND

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
24 ARR	7:48:46.0	7:48:45.6	-763.0	-7.8	54.8	412.4	480.6	120.9
25 DEP	7:52:57.0	7:52:56.7	989.7	6.9	80.8	257.0	316.4	125.7
26 ARR	7:55:16.0	7:55:15.4	-739.2	-7.1	58.7	485.4	693.1	135.5
27 DEP	7:58:15.0	7:58:14.8	1148.8	7.8	83.1	244.7	275.4	117.3
28 ARR	8: 0:37.0	8: 0:36.6	-801.3	-7.7	58.4	396.8	461.1	120.6
29 DEP	8: 2:40.5	8: 2:40.2	1113.8	7.5	83.1	271.0	360.3	131.2
30 ARR	8: 5:21.0	8: 5:20.6	-774.2	-7.4	58.7	386.0	461.9	123.3
31 DEP	8: 7:27.5	8: 7:27.2	1220.8	8.1	85.0	286.7	329.5	119.5
32 ARR	8: 9:45.5	8: 9:44.9	-541.0	-5.2	58.8	389.7	728.5	147.7
33 DEP	8:11:48.0	8:11:47.7	1268.7	8.7	81.7	295.4	327.4	115.5
34 ARR	8:14:10.5	8:14:10.1	-759.8	-7.6	60.9	396.6	425.5	111.3
35 DEP	8:17:46.5	8:17:46.2	1106.8	7.6	81.7	276.0	299.6	112.9
36 ARR	8:19:53.0	8:19:52.5	-743.3	-6.9	61.3	426.9	612.1	135.8
37 DEP	8:21:55.0	8:21:54.7	1156.5	8.0	81.2	282.8	344.5	124.8
38 ARR	8:24:14.0	8:24:13.4	-619.0	-5.8	59.9	392.0	640.7	142.3
40 ARR	8:28:17.5	8:28:17.1	-798.5	-7.8	57.7	390.1	478.6	125.4
41 DEP	8:30:15.0	8:30:14.7	1177.8	7.9	84.3	283.5	354.3	125.5
42 F-W	8:32:40.5	8:32:39.1	-248.2	-1.1	130.9	1014.7	1549.0	139.1
43 F-E	8:35:15.0	8:35:12.6	134.0	0.5	144.0	1044.8	2680.9	157.1
44 F-W	8:37:27.5	8:37:26.1	1524.7	6.1	141.6	1014.9	1588.8	140.3
45 F-E	8:39:57.0	8:39:55.6	-69.7	-0.3	142.4	1046.7	1634.5	140.2
46 F-W	8:42:35.5	8:42:34.9	13.2	0.1	89.3	522.0	667.5	128.6
47 F-E	8:44:54.5	8:44:53.9	-105.8	-0.6	97.3	565.9	646.6	118.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-7

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC #1G CENTERLINE CENTER, GROUND

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
48 F-W	8:53:26.5	8:53:25.6	372.0	1.5	138.2	485.3	1001.2	151.0
49 F-E	8:55:43.0	8:55:41.8	-125.7	-0.5	154.4	551.9	1339.0	155.7
50 F-W	8:57:58.0	8:57:57.2	-64.3	-0.3	143.5	467.8	939.4	150.1
51 F-E	9: 0:15.0	9: 0:14.4	235.5	1.2	112.1	586.4	653.4	116.2
52 F-W	9: 2:30.5	9: 2:29.9	-2.2	-0.0	105.1	517.4	665.0	128.9
53 F-E	9: 5:55.0	9: 5:54.3	158.5	0.8	111.1	577.7	767.3	131.2
55 F-E	9:10:25.5	9:10:24.9	53.2	0.2	123.3	538.4	690.6	128.8
56 F-W	9:12:36.0	9:12:35.4	-214.8	-1.1	105.9	518.4	661.1	128.4
57 F-E	9:14:47.5	9:14:46.7	101.8	0.5	123.2	564.8	902.8	141.3
58 F-W	9:17: 6.5	9:17: 5.8	-91.5	-0.5	113.1	518.2	837.7	141.8
59 F-E	9:19:25.0	9:19:24.0	225.5	0.8	150.4	490.6	1134.9	154.4
60 F-W	9:21:34.5	9:21:33.7	-52.7	-0.2	150.7	522.1	937.3	146.2
61 F-E	9:23:34.5	9:23:33.5	106.2	0.4	150.1	499.4	1184.0	154.6
63 F-E	9:27:51.0	9:27:50.2	84.0	0.3	139.8	564.4	891.6	140.7
64 ARR	9:30: 0.0	9:29:59.7	-829.5	-7.5	61.9	379.5	395.1	106.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-8

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC #1H CENTERLINE CENTER, 33FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
2 F-W	6:17:50.0	6:17:48.6	239.2	1.1	119.0	1007.4	1605.4	141.1
3 F-E	6:21: 4.5	6:21: 3.2	146.7	0.5	152.5	1055.1	1469.2	134.1
4 F-W	6:23:36.5	6:23:35.1	-40.0	-0.2	116.1	967.7	1628.7	143.5
5 F-E	6:26:25.5	6:26:22.6	-15.5	-0.1	144.0	1609.8	3302.4	150.8
6 F-W	6:29: 1.5	6:28:58.8	-84.2	-0.4	134.5	1545.3	3009.9	149.1
8 F-W	6:34:12.5	6:34:11.7	210.5	1.0	118.4	692.9	892.7	129.1
9 F-E	6:36:32.0	6:36:31.6	-69.5	-0.3	140.0	308.5	409.5	131.1
11 F-E	6:41: 0.5	6:40:57.7	87.3	0.4	141.1	1601.9	3129.7	149.2
13 F-E	6:47: 5.0	6:47: 4.2	-249.7	-0.9	149.4	687.3	900.5	130.2
14 F-W	6:49:33.5	6:49:32.5	174.5	0.8	119.9	694.4	1150.9	142.9
15 F-E	6:51:54.5	6:51:54.1	50.2	0.2	139.4	296.3	438.7	137.5
16 F-W	6:53:56.0	6:53:55.0	51.8	0.2	127.8	280.8	1126.9	165.6
17 F-E	6:56:16.5	6:56:14.9	244.3	0.9	147.7	541.7	1854.7	163.0
18 F-W	6:58:40.5	6:58:39.7	70.5	0.3	113.9	521.6	856.4	142.5
19 F-E	7: 2:24.5	7: 2:23.9	-34.0	-0.1	145.8	509.2	712.2	134.4
21 F-E	7:13:35.5	7:13:33.7	-45.7	-0.2	104.8	493.7	2007.0	165.6
22 F-W	7:16:28.5	7:16:28.0	-105.2	-0.7	82.5	500.5	567.7	118.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-8 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM
TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC #1H CENTERLINE CENTER, 33FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
24 ARR	7:48:46.0	7:48:45.6	-763.0	-7.8	54.8	379.7	449.6	122.4
25 DEP	7:52:57.5	7:52:57.3	971.8	6.7	81.7	224.2	249.2	115.9
26 ARR	7:55:16.0	7:55:15.4	-739.2	-7.1	58.7	453.1	666.2	137.1
27 DEP	7:58:15.0	7:58:14.8	1148.8	7.8	83.1	211.9	247.6	121.1
28 ARR	8: 0:37.0	8: 0:36.6	-801.3	-7.7	58.4	364.1	429.3	122.0
29 DEP	8: 2:41.0	8: 2:40.8	1114.0	7.5	83.9	238.3	285.7	123.5
31 DEP	8: 7:27.5	8: 7:27.2	1220.8	8.1	85.0	254.0	301.4	122.6
32 ARR	8: 9:50.0	8: 9:49.7	-506.3	-4.9	58.3	356.8	381.3	110.6
33 DEP	8:11:48.5	8:11:48.3	1276.2	8.8	81.9	263.0	272.4	105.1
34 ARR	8:14:10.5	8:14:10.2	-759.8	-7.0	60.9	363.9	392.3	111.9
35 DEP	8:17:46.5	8:17:46.3	1106.8	7.6	81.7	243.5	270.5	115.9
36 ARR	8:19:53.0	8:19:52.5	-748.3	-6.9	61.3	394.4	584.3	137.6
37 DEP	8:21:55.5	8:21:55.3	1182.5	8.2	81.0	250.1	280.5	116.9
38 ARR	8:24:14.0	8:24:13.5	-619.0	-5.8	59.9	359.1	617.3	144.4
40 ARR	8:28:17.5	8:28:17.1	-798.5	-7.8	57.7	357.4	447.8	127.1
41 DEP	8:30:15.0	8:30:14.7	1177.8	7.9	84.3	255.8	329.4	129.1
42 F-W	8:32:39.5	8:32:38.0	-272.3	-1.2	130.8	981.7	1722.7	145.3
43 F-E	8:35:20.5	8:35:19.3	186.0	0.7	144.1	1012.1	1310.4	129.4
44 F-W	8:37:29.0	8:37:27.9	941.5	4.0	133.6	981.9	1267.7	129.2
45 F-E	8:40: 3.0	8:40: 2.1	45.5	0.2	141.4	1013.9	1061.4	72.8
46 F-W	8:42:35.5	8:42:34.9	13.2	0.1	89.3	429.0	639.3	130.1
47 F-E	8:44:55.0	8:44:54.5	-53.8	-0.3	97.6	533.2	580.4	113.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-8 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
49 F-E	8:55:45.5	8:55:44.9	-169.7	-0.6	151.5	518.9	662.0	128.4
50 F-W	8:57:58.0	8:57:57.2	-64.3	-0.3	143.5	434.8	919.4	151.8
51 F-E	9: 0:14.0	9: 0:13.3	234.7	1.2	112.8	553.5	741.8	131.7
52 F-W	9: 2:30.5	9: 2:29.9	-2.2	-0.0	105.1	484.4	637.6	130.6
53 F-E	9: 5:55.0	9: 5:54.3	158.5	0.8	111.1	544.7	740.5	132.6
54 F-W	9: 8: 4.5	9: 8: 4.0	-133.8	-0.6	120.0	485.7	620.3	128.5
55 F-E	9:10:25.5	9:10:24.9	53.2	0.2	123.3	505.4	662.5	130.3
56 F-W	9:12:36.0	9:12:35.4	-214.8	-1.1	105.9	485.4	631.6	129.8
57 F-E	9:14:48.5	9:14:47.9	54.3	0.2	123.0	531.8	700.7	130.6
58 F-W	9:17: 8.0	9:17: 7.5	-131.2	-0.7	112.5	485.2	587.7	124.4
59 F-E	9:19:24.0	9:19:22.7	112.3	0.4	151.2	457.6	1422.3	161.2
60 F-W	9:21:33.5	9:21:32.5	-48.8	-0.2	148.7	489.1	1193.1	155.8
61 F-E	9:23:33.0	9:23:31.6	-136.8	-0.5	150.3	466.5	1604.7	163.1
63 F-E	9:27:51.5	9:27:50.8	143.8	0.6	140.1	531.5	759.5	135.6
64 ARR	9:29:59.5	9:29:59.2	-835.7	-7.6	62.0	346.7	380.5	114.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-9

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC #5G SIDELINE SOUTH, GROUND

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
2 F-W	6:17:51.5	6:17:50.2	269.5	1.3	119.4	1148.8	1480.5	129.1
3 F-E	6:21: 0.5	6:20:58.1	18.2	0.1	153.8	1285.5	2663.6	151.1
4 F-W	6:23:36.5	6:23:35.0	-40.0	-0.2	116.1	1110.8	1732.9	140.1
5 F-E	6:26:31.0	6:26:29.0	24.0	0.1	143.4	1836.1	2234.6	124.7
6 F-W	6:29: 6.5	6:29: 4.7	150.2	0.6	133.4	1621.1	2034.1	127.2
8 F-W	6:34:12.5	6:34:11.6	210.5	1.0	118.4	863.8	1045.7	124.3
9 F-E	6:36:30.5	6:36:29.7	2.5	0.0	140.3	616.1	963.4	140.2
10 F-W	6:38:27.0	6:38:26.5	243.3	1.1	124.8	568.0	599.3	108.6
11 F-E	6:41: 2.5	6:41: 0.0	169.2	0.7	141.2	1812.9	2787.3	139.4
13 F-E	6:47: 3.0	6:47: 1.7	-76.7	-0.3	150.0	911.1	1525.2	143.3
14 F-W	6:49:33.0	6:49:31.8	207.8	1.0	119.7	851.6	1359.2	141.2
15 F-E	6:51:52.5	6:51:51.5	0.2	0.0	139.9	606.5	1120.0	147.2
16 F-W	6:53:59.0	6:53:58.4	395.2	1.8	127.5	558.7	656.5	121.7
17 F-E	6:56:19.5	6:56:18.5	211.8	0.8	147.7	798.8	1187.3	137.7
18 F-W	6:58:42.0	6:58:41.3	93.7	0.4	119.1	722.4	812.7	117.3
19 F-E	7: 2:22.0	7: 2:20.7	54.8	0.2	145.5	763.6	1494.6	149.3
21 F-E	7:13:36.5	7:13:34.8	-39.3	-0.2	104.5	774.2	1922.1	156.2
22 F-W	7:16:29.0	7:16:28.3	-120.2	-0.8	82.9	719.7	752.8	107.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-9 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980 FAA/AEE 120
A109 MAR 12,1981
MIC #5G SIDELINE SOUTH, GROUND

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
24 ARR	7:48:46.0	7:48:45.4	-763.0	-7.8	54.8	619.7	676.4	113.6
25 DEP	7:52:56.5	7:52:55.9	973.8	6.8	80.8	562.2	631.8	117.2
26 ARR	7:55:11.5	7:55:10.5	-473.5	-4.6	58.2	654.1	1167.9	145.9
27 DEP	7:58:14.0	7:58:13.4	1086.7	7.4	82.8	556.2	640.0	119.7
28 ARR	8: 0:35.0	8: 0:34.3	-806.2	-7.8	58.2	649.4	800.0	125.7
29 DEP	8: 2:40.5	8: 2:40.0	1113.8	7.5	83.1	564.3	619.4	114.4
30 ARR	8: 5:16.5	8: 5:15.7	-455.3	-4.4	59.1	627.0	964.5	139.5
31 DEP	8: 7:27.0	8: 7:26.4	1200.3	7.9	85.4	575.1	636.1	115.3
32 ARR	8: 9:47.0	8: 9:46.3	-530.8	-5.1	59.0	630.7	792.5	127.3
33 DEP	8:11:47.0	8:11:46.4	1232.2	8.5	81.7	588.0	669.1	118.5
34 ARR	8:14: 4.5	8:14: 3.6	-581.0	-5.5	60.0	634.8	1036.7	142.2
35 DEP	8:17:45.5	8:17:44.9	1101.2	7.7	80.9	585.1	653.1	116.4
36 ARR	8:19:52.5	8:19:51.3	-742.3	-6.8	61.5	658.8	851.0	129.3
37 DEP	8:21:55.0	8:21:54.5	1156.5	8.0	81.2	563.1	616.7	112.9
38 ARR	8:24:14.5	8:24:13.3	-565.3	-5.3	59.7	634.9	797.1	127.2
40 ARR	8:28:20.5	8:28:20.0	-844.2	-8.2	57.6	616.3	616.6	88.4
41 DEP	8:30:15.0	8:30:14.5	1177.8	7.9	84.3	570.4	615.8	112.1
42 F-W	8:32:39.5	8:32:37.9	-272.3	-1.2	130.8	1151.0	1846.2	141.4
43 F-E	8:35:12.0	8:35: 8.8	194.3	0.2	143.6	1213.1	3599.0	160.3
44 F-W	8:37:29.0	8:37:27.8	941.5	4.0	133.6	1141.0	1348.3	122.2
45 F-E	8:39:51.0	8:39:48.1	-102.0	-0.4	141.6	1199.6	3255.8	158.4
46 F-W	8:42:36.0	8:42:35.3	6.3	0.0	89.4	728.1	815.6	116.8
47 F-E	8:44:55.0	8:44:54.3	-53.8	-0.3	97.6	709.1	837.1	107.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C3-9 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 24,1980
A109
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
48 F-W	8:53:27.5	8:53:26.7	394.7	1.5	144.5	709.0	947.2	131.5
49 F-E	8:55:42.5	8:55:41.1	-86.8	-0.3	153.8	758.0	1596.8	151.7
50 F-W	8:57:59.5	8:57:58.8	84.0	0.3	139.8	672.3	772.4	119.5
51 F-E	9: 0:15.0	9: 0:14.3	235.5	1.2	112.1	779.0	841.7	112.2
52 F-W	9: 2:29.5	9: 2:28.6	-71.8	-0.4	105.1	728.7	984.6	132.3
53 F-E	9: 5:56.5	9: 5:55.8	50.8	0.3	111.0	773.5	812.3	107.8
55 F-E	9:10:26.5	9:10:25.8	51.0	0.2	123.0	731.2	767.7	107.7
56 F-W	9:12:35.5	9:12:34.7	-209.8	-1.1	106.0	726.8	907.5	126.8
57 F-E	9:14:50.0	9:14:49.4	165.7	0.8	123.5	729.9	744.2	101.3
58 F-W	9:17: 8.0	9:17: 7.3	-131.2	-0.7	112.5	733.8	825.6	117.3
59 F-E	9:19:25.5	9:19:24.5	273.3	1.0	150.4	701.7	1146.6	142.3
60 F-W	9:21:34.5	9:21:33.5	-52.7	-0.2	150.7	716.9	1087.6	138.8
61 F-E	9:23:33.0	9:23:31.5	-138.8	-0.5	150.3	720.8	1720.2	155.2
63 F-E	9:27:49.0	9:27:47.7	110.8	0.4	139.6	774.6	1502.9	149.0
64 ARR	9:30: 1.5	9:30: 1.0	-759.2	-7.0	60.9	625.4	626.7	86.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

Sub-Appendix C4 Summary
S76 June 25, 1980
Flight Path Tracking Plots and Position Data

Notes: 107% Main Rotor RPM

1. FLIGHT PATH TRACKING PLOTS

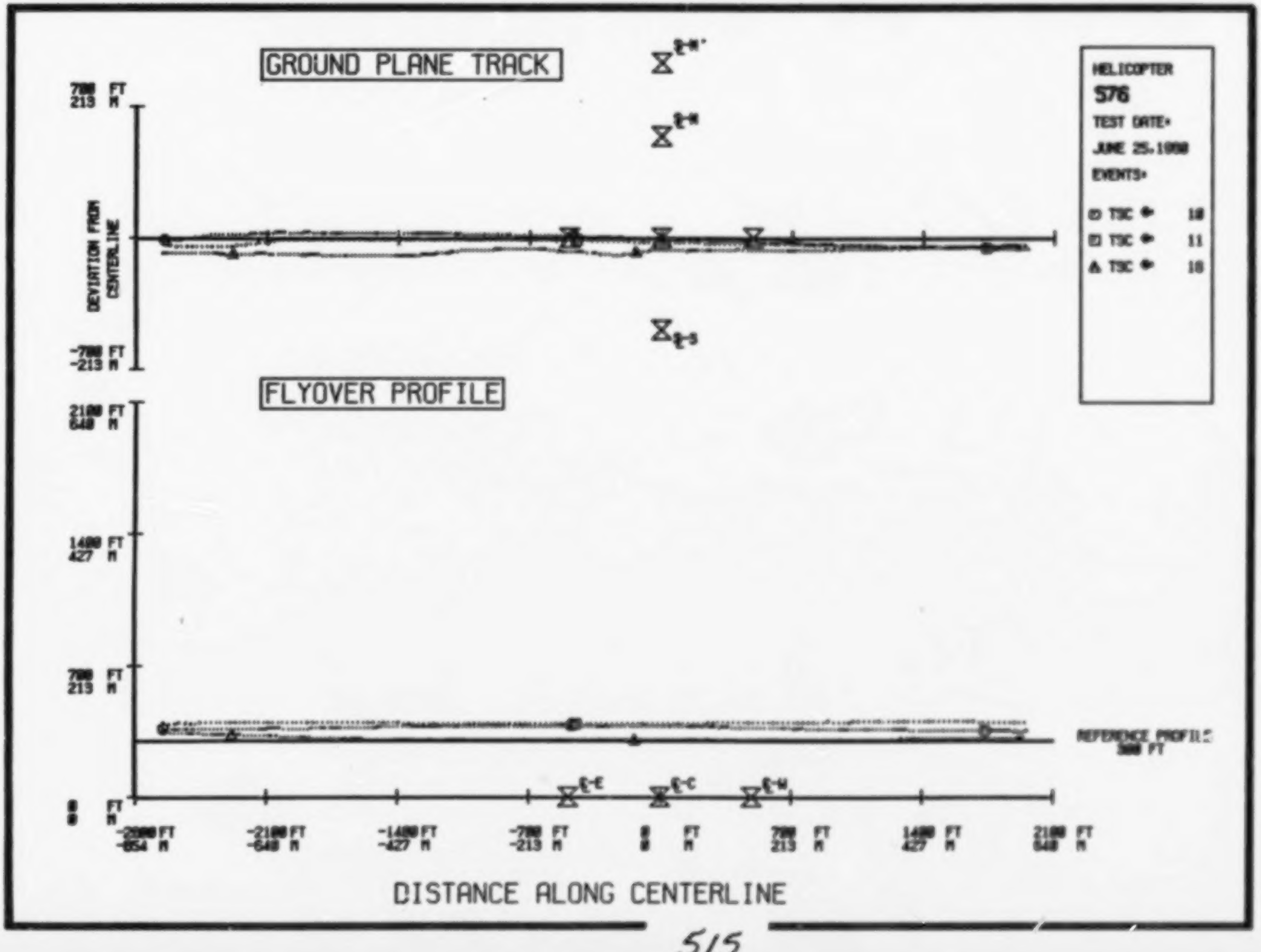
Event No.	Plot Fig No.	Operation			
10	C4-1	300 Ft.	LFO	140 kts	Target Speed
11	"	"		"	"
16	"	"		"	"
18	C4-2	500 Ft.	LFO	109 kts	Target Speed
19	"	"		"	"
21	"	"		"	"
22	"	"		"	"
23	"	"		"	"
25	"	"		124 kts	"
26	C4-3	500 Ft.	LFO	124 kts	Target Speed
27	"	"		"	"
28	"	"		"	"
29	"	"		"	"
31	C4-4	2500 Ft.	LFO	140 kts	Target Speed
32	"	"		"	"
33	"	"		"	"
34	C4-5	2000 Ft.	LFO	140 kts	Target Speed
35	"	"		"	"
36	"	"		"	"
37	"	"		"	"
52	C4-6	1000 Ft.	LFO	140 kts	Target Speed
53	"	"		"	"
54	"	"		"	"
55	"	"		"	"

Event No.	Plot Fig No.	Operation		
40	C4-7	Approach		
42	"	"		
44	"	"		
46	"	"		
48	"	"		
41	C4-8	Takeoff		
43	"	"		
47	"	"		
49	"	"		
51	"	"		
1	C4-9	1000 Ft. LFO	140 kts	Target Speed
2	"	"	"	"
3	"	"	"	"
4	"	"	"	"
5	C4-10	1500 Ft. LFO	140 kts	Target Speed
7	"	"	"	"
13	"	"	"	"
38	"	"	"	"
39	"	"	"	"
8	C4-11	700 Ft. LFO	140 kts	Target Speed
9	"	"	"	"
14	"	"	"	"
15	"	"	"	"

2. POSITION DATA TABLES

Table No.	Microphone
C4-1	Mic. 1, Centerline Center, 4 ft.
C4-2	Mic. 2, Centerline 150m West 4 ft.
C4-3	Mic. 3, Centerline 150m East 4 ft.
C4-4	Mic. 4, Sideline 164m North 4 ft.
C4-5	Mic. 5, Sideline 150m South 4 ft.
C4-6	Mic. 6, Sideline 284m North 4 ft.
C4-7	Mic. 1G, Centerline Center (Ground)
C4-8	Mic. 1H, Centerline Center 33 ft.
C4-9	Mic. 5G, Sideline 150m South (Ground)

FIGURE C4-1



BEST DOCUMENT AVAILABLE

TABLE C4-2

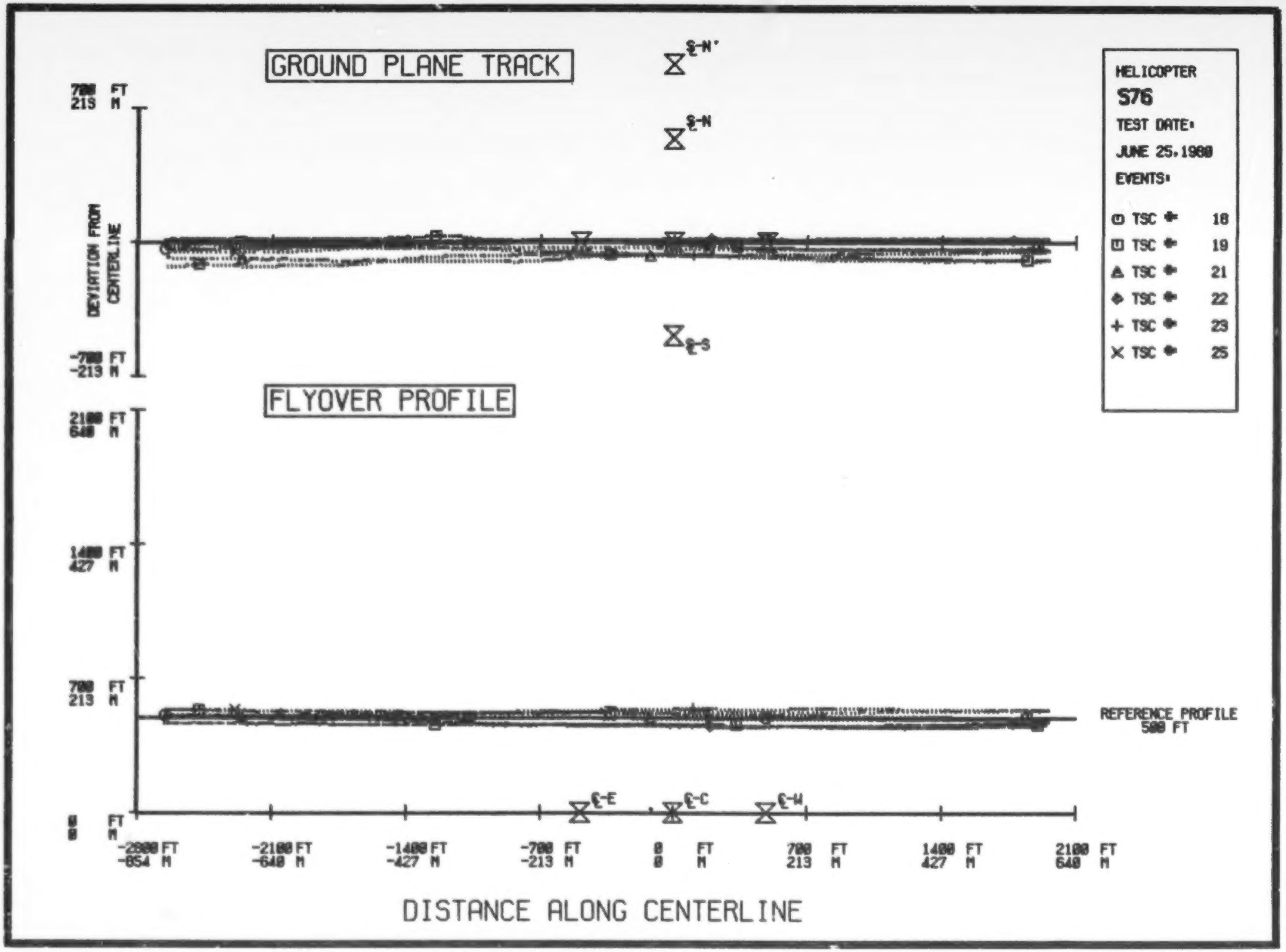

GROUND PLANE TRACK
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
℄-N'
℄-N
℄-S
HELICOPTER
S76
TEST DATE:
JUNE 25, 1980
EVENTS:
○ TSC # 18
□ TSC # 19
△ TSC # 21
◆ TSC # 22
+ TSC # 23
× TSC # 25
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
500 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C4-3

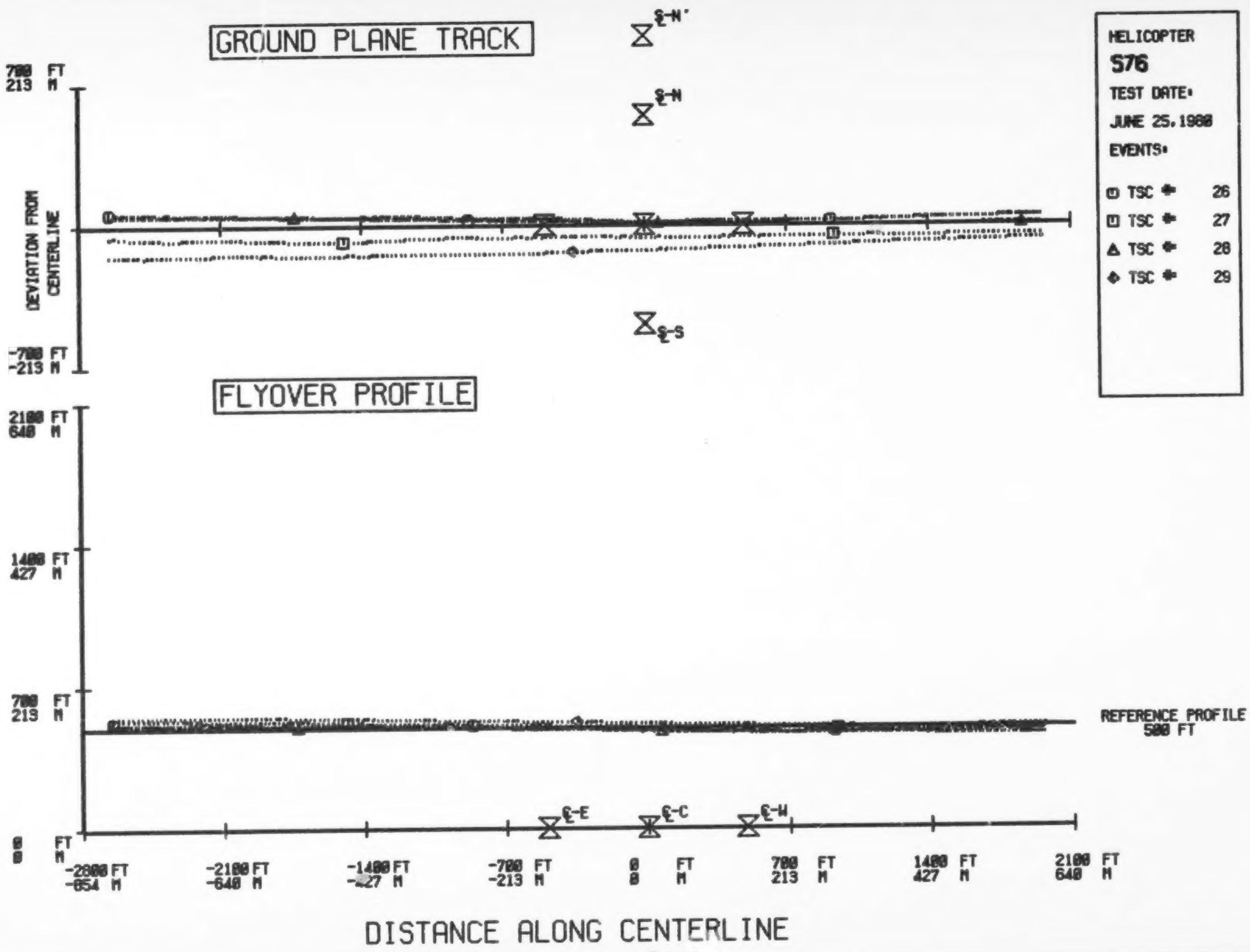

GROUND PLANE TRACK
FLYOVER PROFILE
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
REFERENCE PROFILE 500 FT
DISTANCE ALONG CENTERLINE
HELICOPTER
S76
TEST DATE:
JUNE 25, 1980
EVENTS:
TSC # 26
TSC # 27
TSC # 28
TSC # 29

FIGURE C4-4

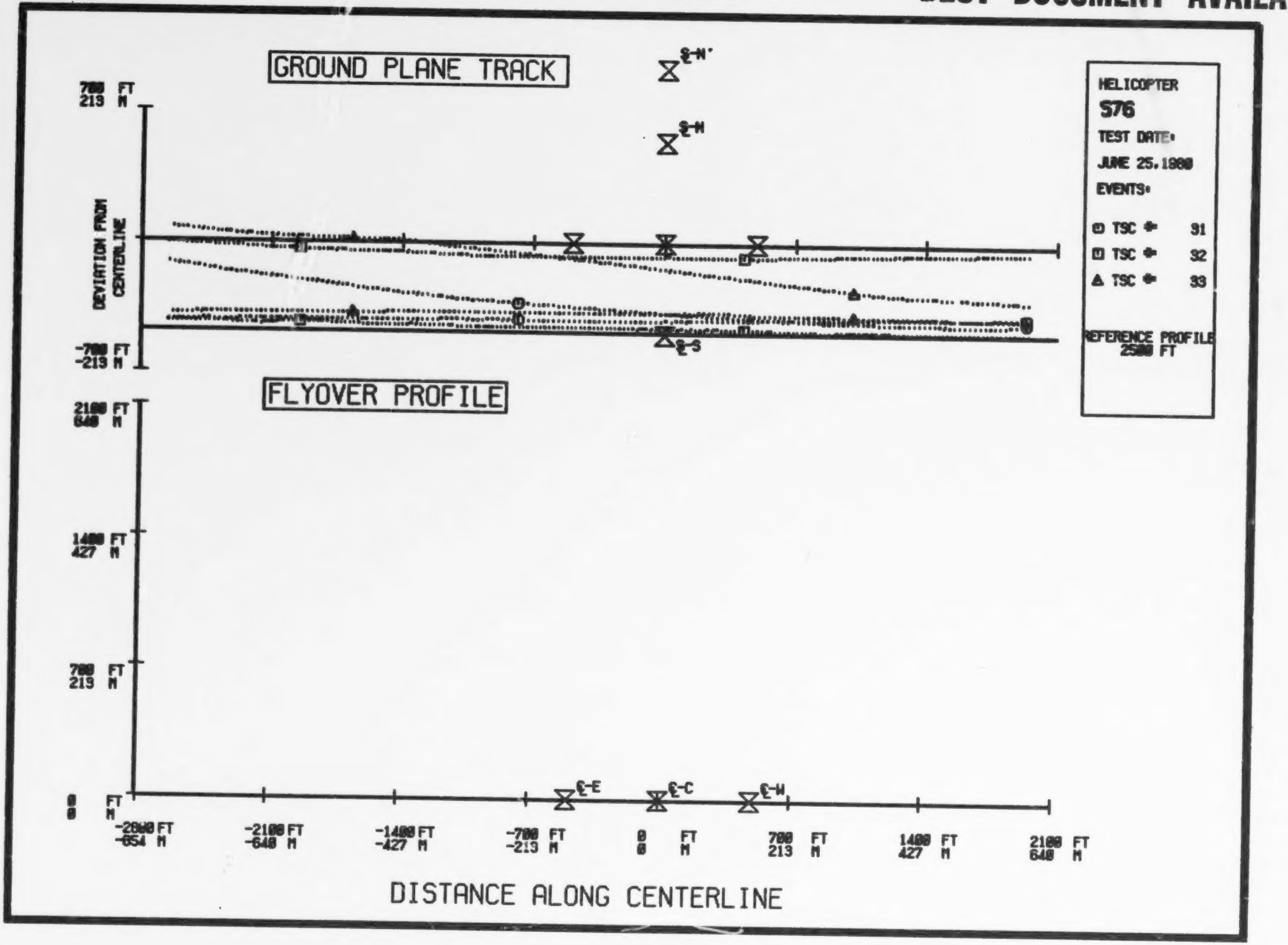
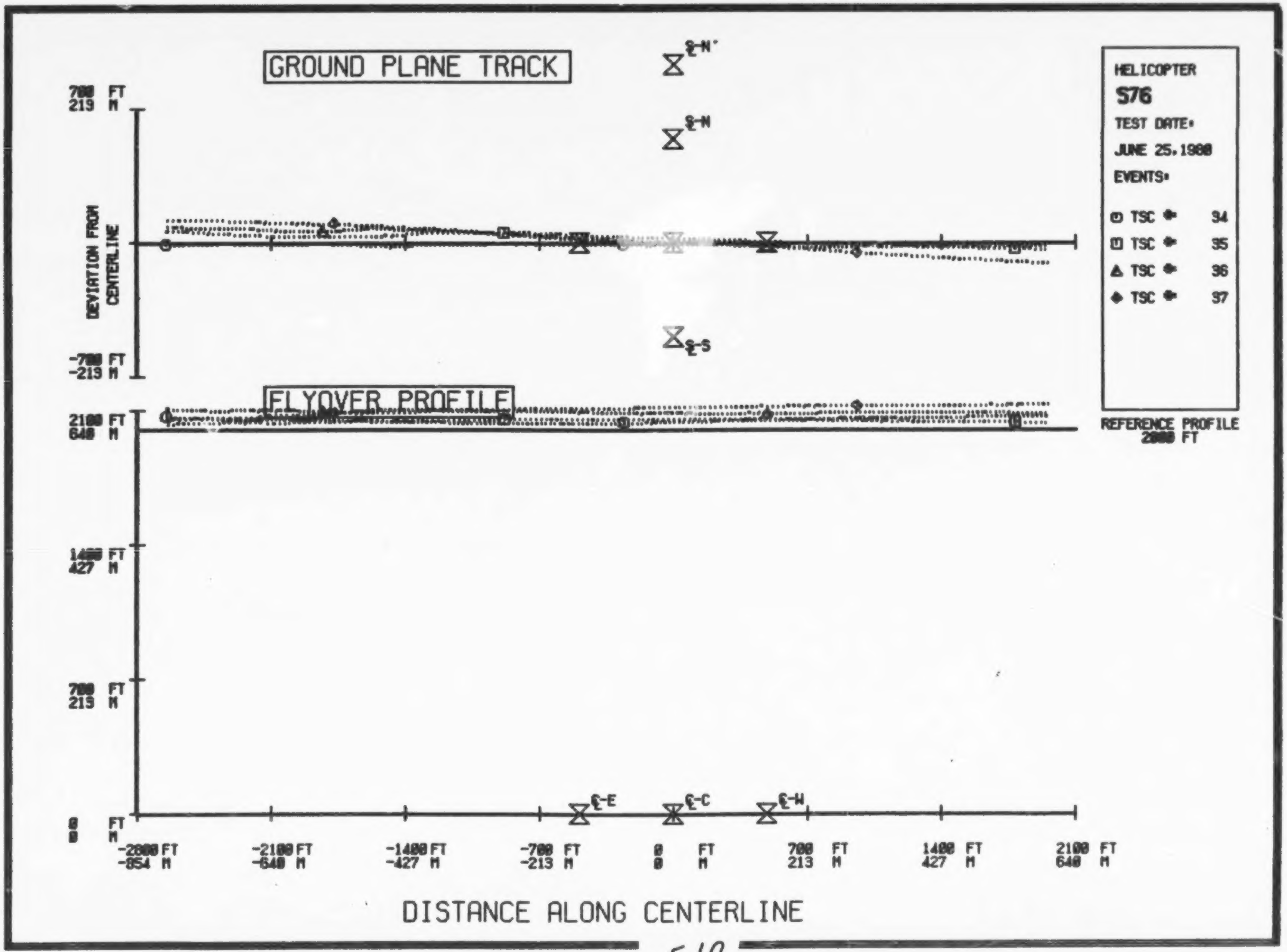

GROUND PLANE TRACK
℄-N'
℄-N
700 FT
213 M
DEVIATION FROM CENTERLINE
-700 FT
-213 M
℄-S
HELICOPTER
S76
TEST DATE:
JUNE 25,1980
EVENTS:
⊙ TSC # 31
⊡ TSC # 32
△ TSC # 33
REFERENCE PROFILE
2500 FT
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C4-5



BEST DOCUMENT AVAILABLE

FIGURE C4-6

BEST DOCUMENT AVAILABLE

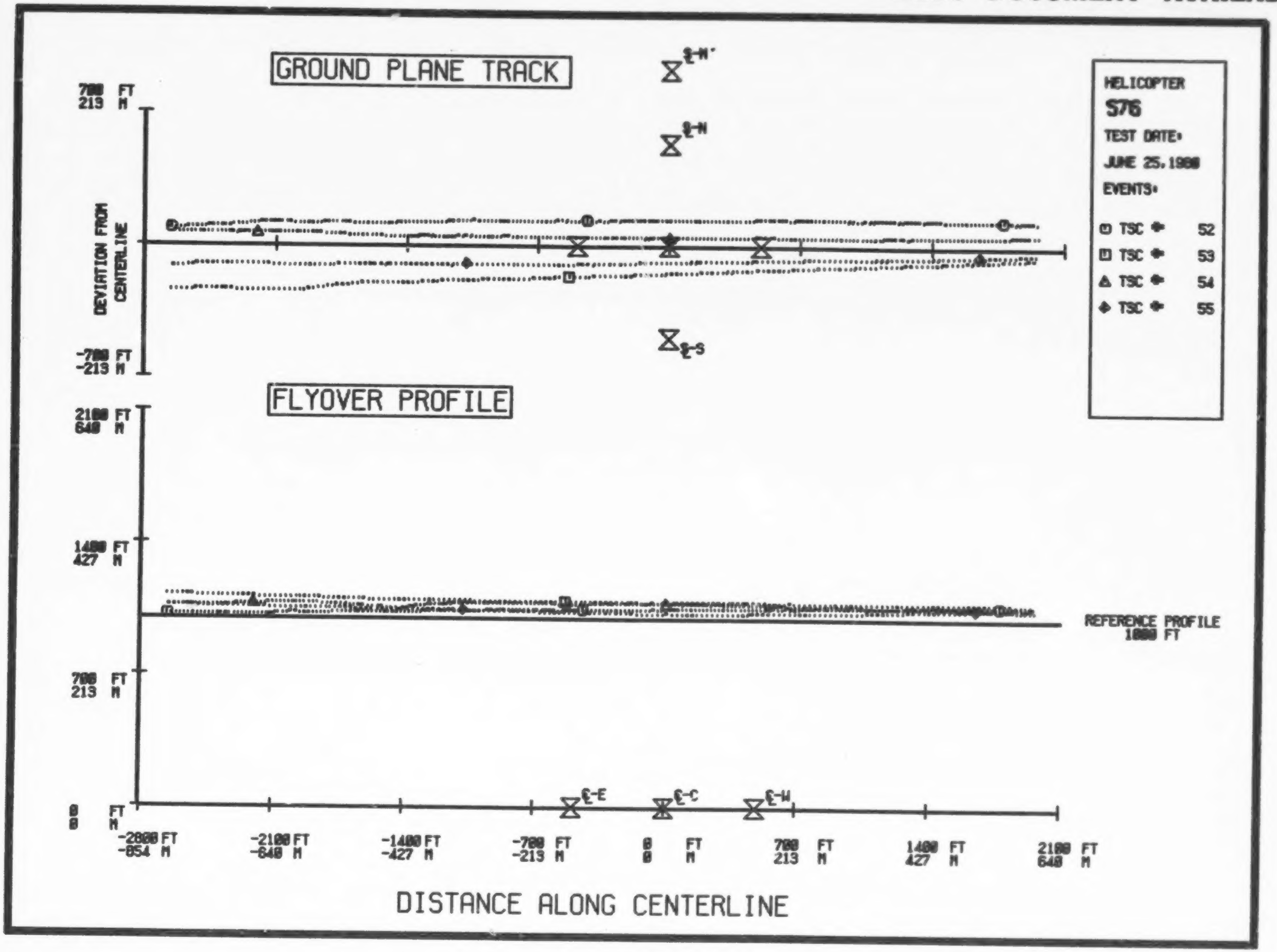


FIGURE C4-7

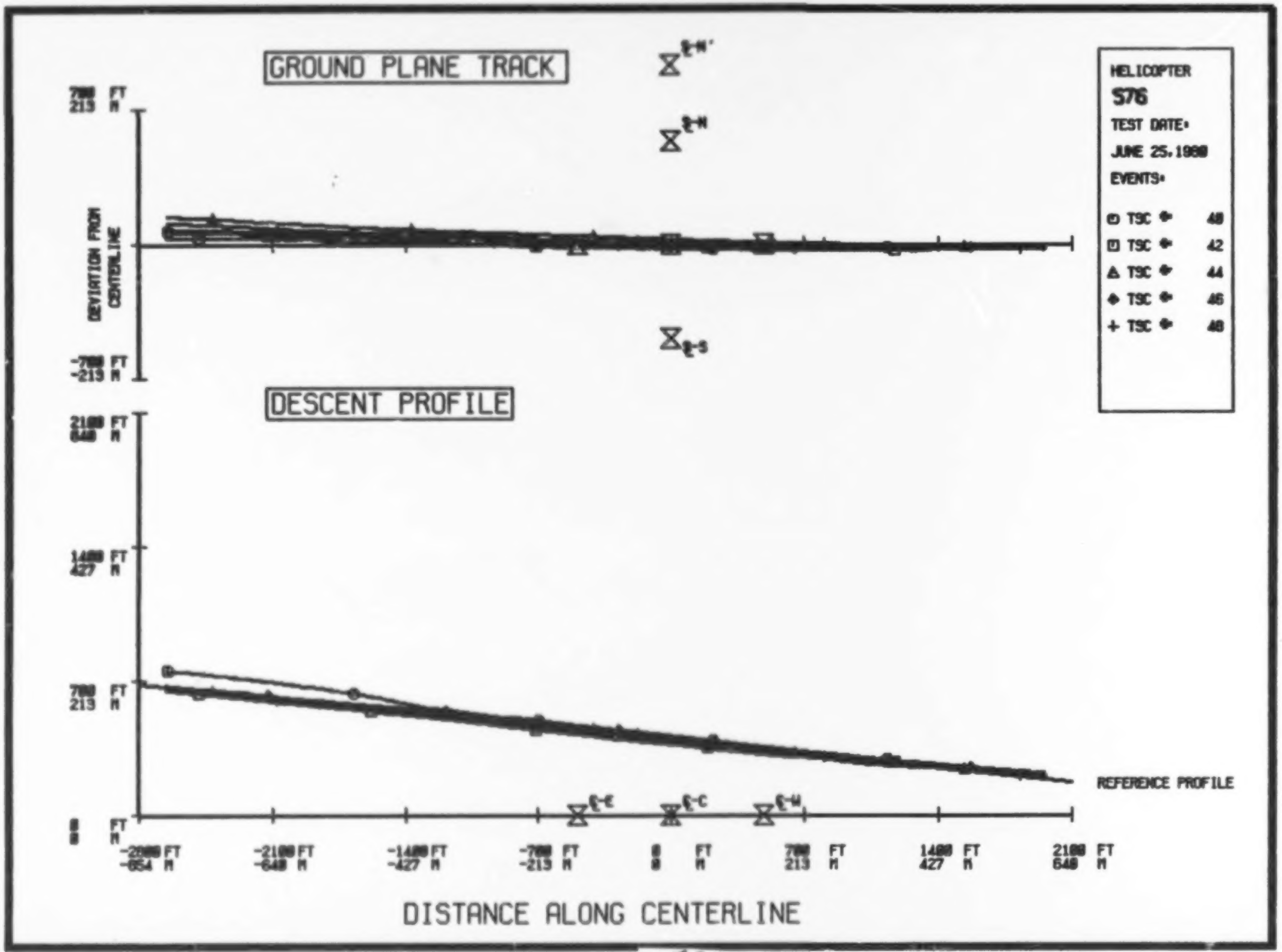

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
HELICOPTER
S76
TEST DATE:
JUNE 25, 1980
EVENTS:
⊡ TSC # 40
☐ TSC # 42
△ TSC # 44
◆ TSC # 46
+ TSC # 48
DESCENT PROFILE
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
REFERENCE PROFILE
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE

FIGURE C4-8

BEST DOCUMENT AVAILABLE

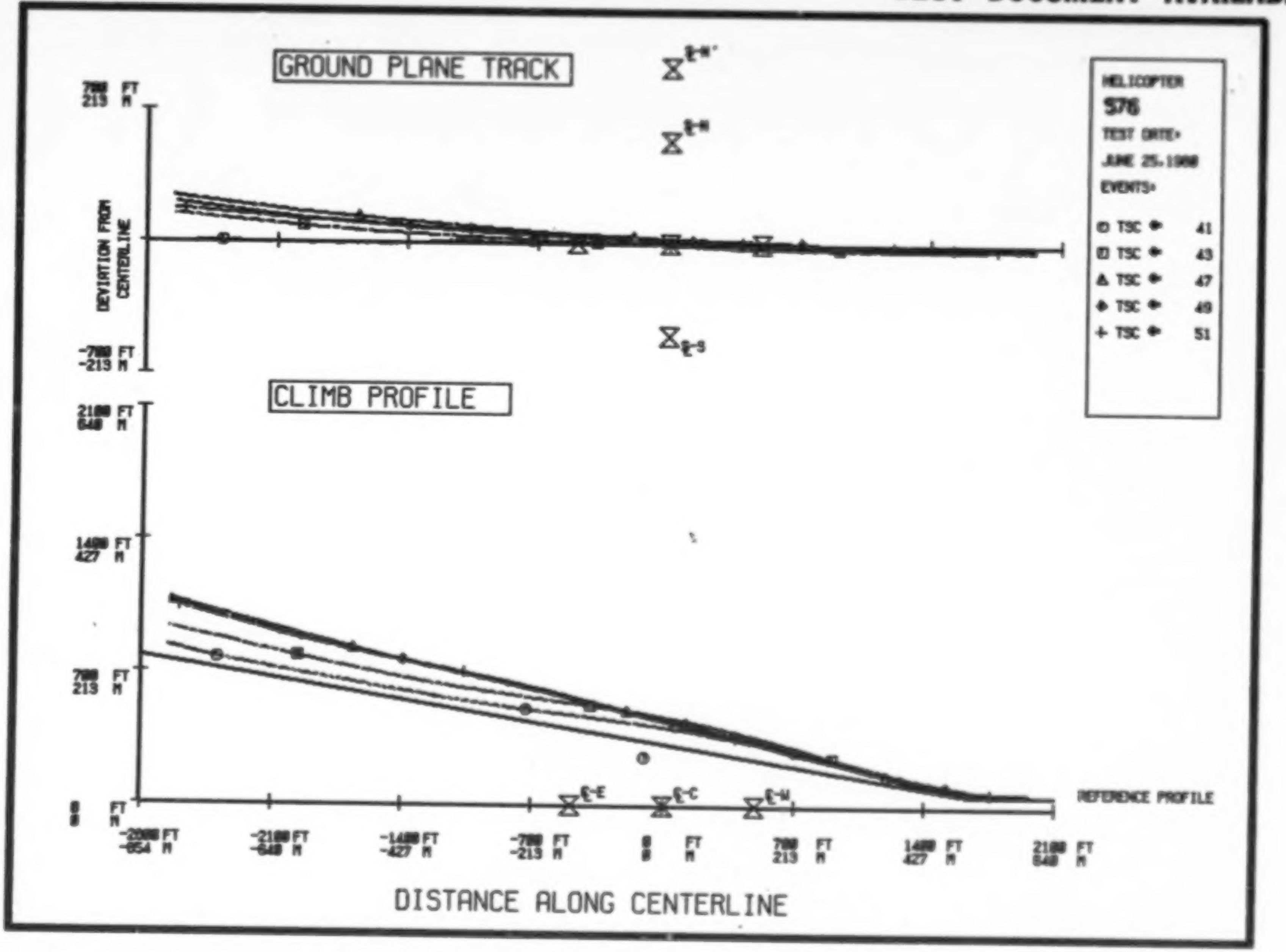


FIGURE C4-9

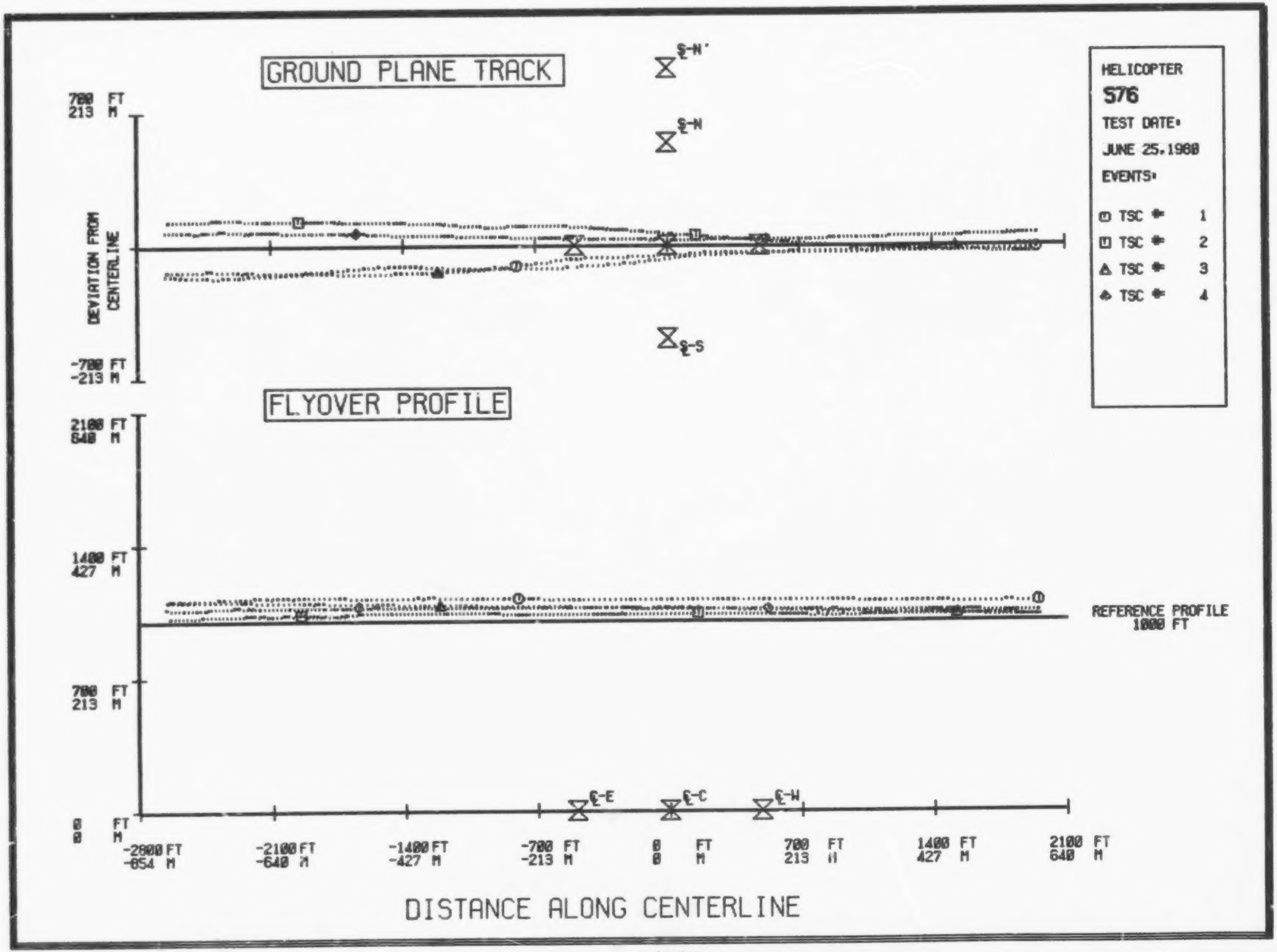

GROUND PLANE TRACK
700 FT 213 M
DEVIATION FROM CENTERLINE
-700 FT -213 M
℄-N'
℄-N
℄-S
FLYOVER PROFILE
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
REFERENCE PROFILE 1000 FT
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
S76
TEST DATE:
JUNE 25,1980
EVENTS:
TSC # 1
TSC # 2
TSC # 3
TSC # 4

FIGURE C4-10

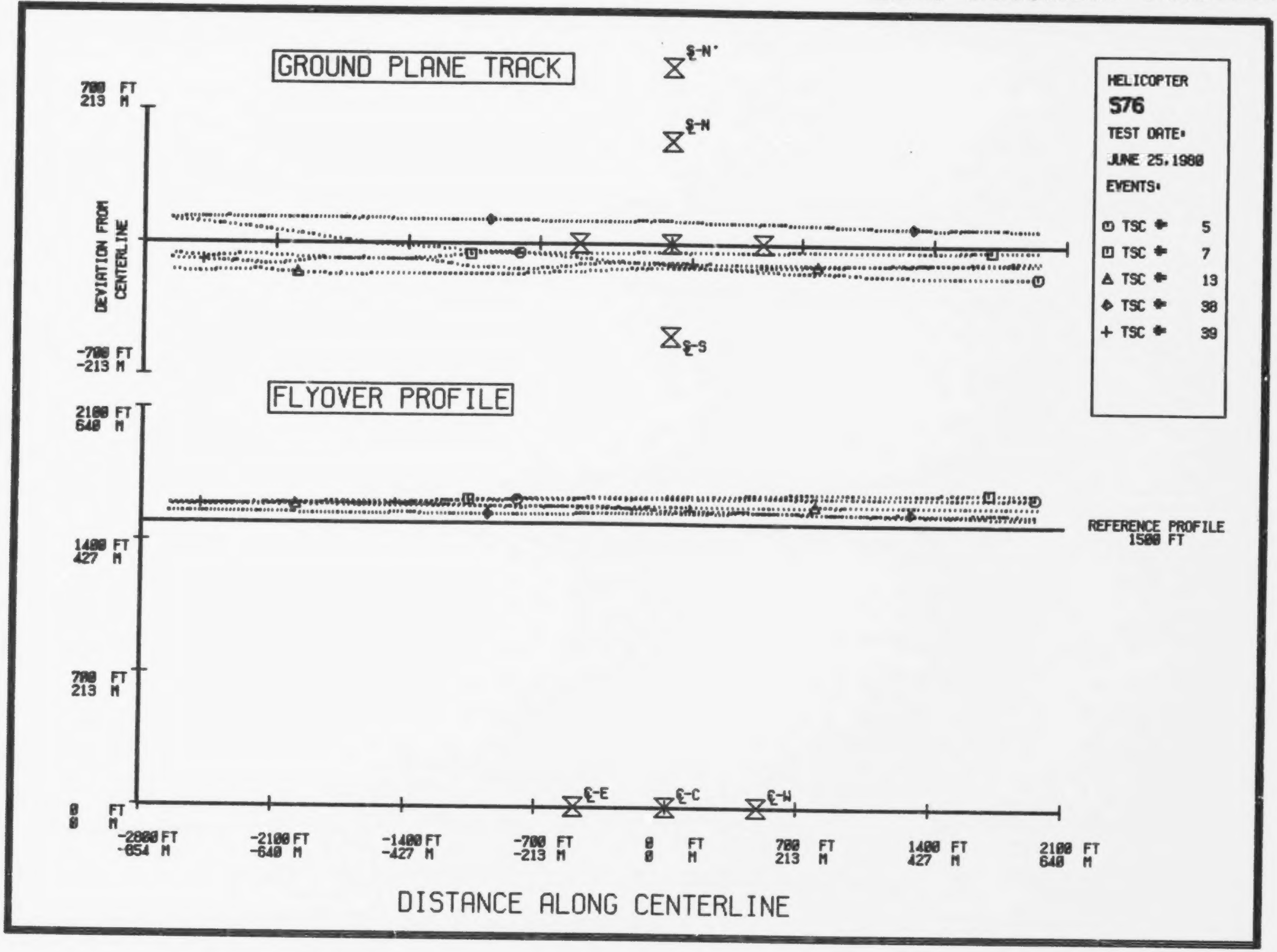

GROUND PLANE TRACK
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
℄-N'
℄-N
℄-S
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE 1500 FT
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
S76
TEST DATE:
JUNE 25, 1980
EVENTS:
TSC # 5
TSC # 7
TSC # 13
TSC # 38
TSC # 39

FIGURE C4-11

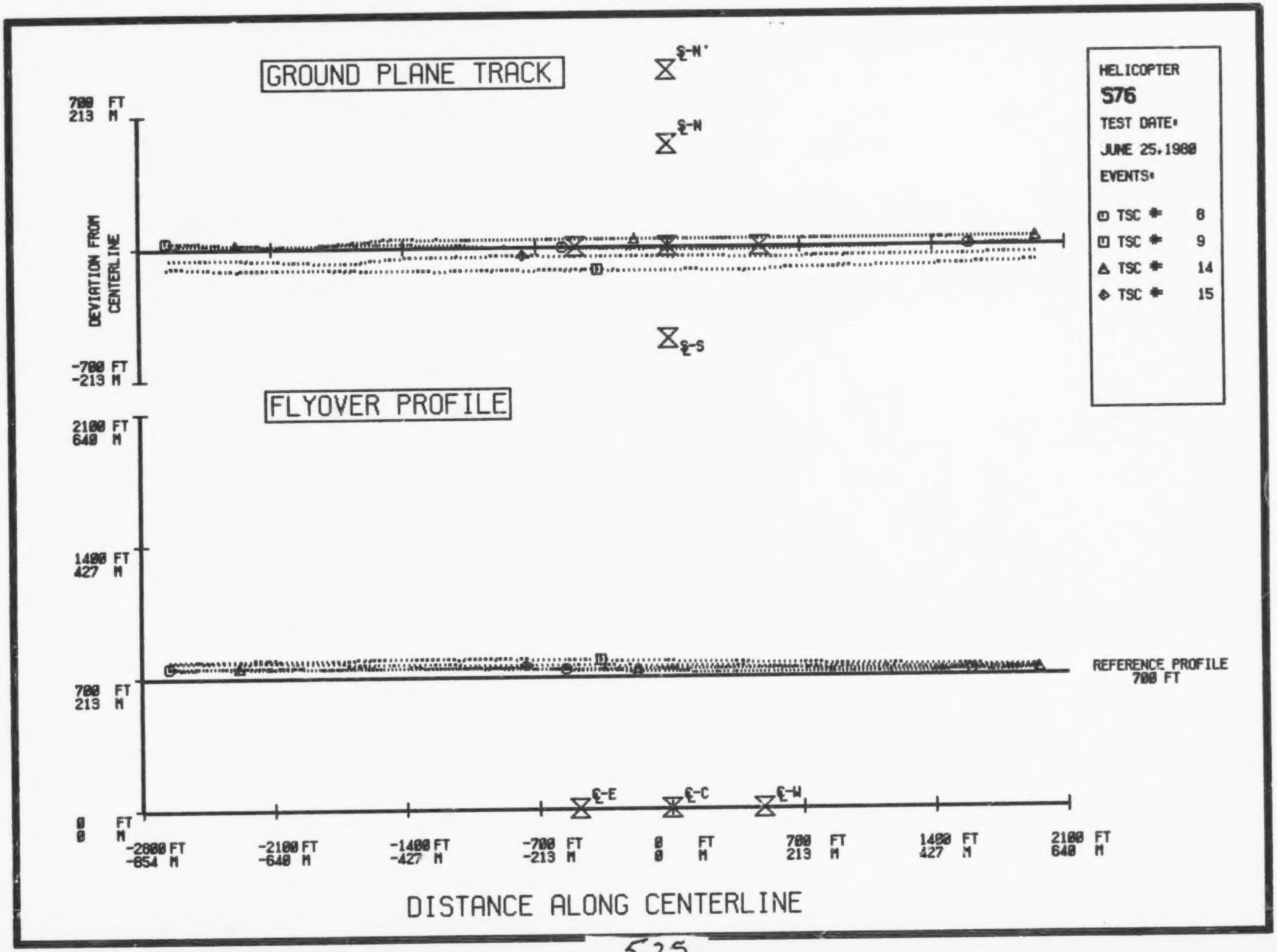

GROUND PLANE TRACK
FLYOVER PROFILE
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE 700 FT
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
576
TEST DATE:
JUNE 25, 1980
EVENTS:
TSC # 8
TSC # 9
TSC # 14
TSC # 15

TABLE C4-1

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25, 1980
S76
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
FEB 6, 1981

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5: 3:46.5	5: 3:45.3	81.5	0.3	163.9	1109.1	1392.6	127.2
2 F-W	5: 6:21.5	5: 6:20.2	-106.2	-0.5	124.2	1034.4	1481.5	135.7
3 F-E	5: 8:29.0	5: 8:27.7	312.7	1.1	163.5	1063.3	1513.9	135.4
4 F-W	5:11:20.5	5:11:19.3	-73.0	-0.3	128.6	1063.0	1336.9	127.3
5 F-E	5:13:54.5	5:13:52.1	-79.5	-0.3	163.5	1627.9	2668.0	142.4
7 F-E	5:19: 5.0	5:19: 3.4	-292.2	-1.0	163.9	1636.4	1849.9	117.8
8 F-W	5:22: 4.0	5:22: 3.1	-269.8	-1.2	127.8	721.2	1006.3	134.2
9 F-E	5:24:14.5	5:24:13.6	306.2	1.1	164.6	785.5	993.6	127.8
10 F-W	5:26:43.0	5:26:42.5	-48.0	-0.2	129.3	372.3	531.9	135.6
11 F-E	5:28:37.5	5:28:37.0	-169.3	-0.6	160.0	387.2	553.5	135.6
13 F-E	5:33:19.0	5:33:17.1	-118.0	-0.4	163.1	1588.1	2128.0	131.7
14 F-W	5:36: 3.0	5:36: 2.1	-85.8	-0.4	126.1	736.6	1007.0	133.0
15 F-E	5:38: 7.0	5:38: 6.0	152.5	0.5	162.0	753.9	1104.5	137.0
16 F-W	5:40:32.5	5:40:32.1	-29.3	-0.1	127.0	309.8	418.8	132.3
18 F-W	5:46:42.0	5:46:41.3	-7.7	-0.0	92.8	431.2	745.7	138.7
19 F-E	5:48:40.0	5:48:39.4	131.8	0.6	129.7	514.3	680.6	130.9
21 F-E	5:53:44.0	5:53:43.4	0.7	0.0	125.3	489.6	738.9	138.5
22 F-W	5:56:50.5	5:56:50.0	-92.3	-0.6	94.9	447.8	592.0	130.8
23 F-E	5:59:16.0	5:59:15.3	-46.8	-0.2	126.9	541.4	758.4	134.5

REC. TIME: TIME PNLTM WAS RECORDED, RAD. TIME: TIME PNLTM WAS RADIATED
R/C: AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG: CLIMB OR DESCENT ANGLE
GS: GROUND SPEED, CPA: CLOSEST POINT OF APPROACH
SR: SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG: ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-1 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
FEB 6,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-E	6: 8: 2.5	6: 8: 1.8	-39.7	-0.2	147.0	520.4	738.0	135.2
26 F-W	6:11:12.0	6:11:11.5	-211.8	-1.1	106.3	478.2	625.9	130.2
27 F-E	6:13:30.5	6:13:29.9	222.3	0.9	145.1	497.3	662.0	131.3
28 F-W	6:16:46.5	6:16:46.1	-188.7	-1.0	106.9	474.4	479.7	81.5
29 F-E	6:19: 9.0	6:19: 8.4	258.0	1.0	144.7	526.5	702.1	131.4
31 F-E	6:25:58.0	6:25:55.3	-242.8	-0.9	161.1	2585.8	3040.8	121.7
32 F-W	6:29:24.5	6:29:21.5	-299.2	-1.2	141.6	2519.3	3377.8	131.8
33 F-E	6:33: 4.0	6:33: 0.3	178.3	0.6	161.0	2004.1	4233.2	142.0
34 F-W	6:39: 9.5	6:39: 7.4	-13.8	-0.1	141.8	2037.0	2374.9	120.9
35 F-E	6:42:46.5	6:42:44.0	198.0	0.7	157.6	2053.3	2786.0	132.5
36 F-W	6:46:38.5	6:46:36.0	34.2	0.1	136.8	2085.0	2776.8	131.3
37 F-E	6:50: 6.5	6:50: 3.3	-167.5	-0.6	160.3	2115.4	3628.5	144.3
38 F-W	6:54: 1.0	6:53:59.1	-40.8	-0.2	134.1	1554.3	2114.1	132.7
39 F-E	6:56:57.5	6:56:55.2	199.0	0.7	155.4	1568.0	2582.1	142.6
40 ARR	7: 0:45.0	7: 0:44.6	-628.0	-6.6	53.3	410.0	410.5	87.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-1 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
FEB 6,1981

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41	DEP	7:26:56.5	7:26:56.0	1446.0	10.1	80.1	408.4	547.2	131.7
42	ARR	7:30:41.5	7:30:41.0	-618.2	-6.5	53.3	366.7	580.8	140.9
43	DEP	7:33: 5.0	7:33: 4.6	1292.7	8.7	83.5	458.7	505.2	65.2
44	ARR	7:36:42.0	7:36:41.6	-676.8	-6.8	56.0	397.1	440.3	115.6
46	ARR	7:43:23.0	7:43:22.7	-700.7	-7.3	54.2	402.1	402.9	93.5
47	DEP	7:45:34.5	7:45:34.0	2042.2	13.8	22.3	437.3	584.1	131.5
48	ARR	7:49:35.0	7:49:34.6	-759.8	-7.6	56.0	394.7	467.7	122.4
49	DEP	7:52: 2.0	7:52: 1.5	1966.3	12.9	84.5	449.0	593.8	130.9
51	DEP	7:58: 7.5	7:58: 7.0	1950.5	12.8	84.8	430.4	557.5	129.5
52	F-W	8: 1: 0.5	8: 0:59.4	90.5	0.4	131.9	1057.4	1241.9	121.6
53	F-E	8: 3:29.5	8: 3:28.1	67.5	0.2	160.9	1092.9	1606.6	137.1
54	F-W	8: 6:21.5	8: 6:18.7	228.3	1.0	128.2	1110.1	3163.2	159.5
55	F-E	8: 8:27.0	8: 8:25.7	-172.8	-0.8	162.1	1030.4	1425.2	133.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-2

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
FEB 6,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5: 3:43.5	5: 3:42.0	137.5	0.5	164.8	1106.1	1669.1	138.5
2 F-W	5: 6:26.5	5: 6:25.5	-70.7	-0.3	127.2	1030.0	1117.1	112.8
3 F-E	5: 8:28.5	5: 8:27.4	296.7	1.0	163.3	1053.7	1241.3	121.9
4 F-W	5:11:23.5	5:11:22.4	-83.5	-0.4	129.0	1058.7	1231.0	120.7
5 F-E	5:13:56.0	5:13:54.3	-73.5	-0.3	163.4	1635.9	1933.2	122.2
7 F-E	5:19: 3.5	5:19: 1.9	-238.8	-0.8	164.0	1644.6	1816.0	115.1
8 F-W	5:22: 7.0	5:22: 6.2	-133.8	-0.6	128.2	717.3	880.1	125.4
9 F-E	5:24:12.5	5:24:11.6	288.3	1.0	165.8	776.5	1036.1	131.5
10 F-W	5:26:45.5	5:26:45.1	-145.8	-0.6	130.7	368.0	485.0	130.6
11 F-E	5:28:35.5	5:28:35.0	-148.8	-0.5	159.4	395.2	597.0	138.5
13 F-E	5:33:18.5	5:33:16.8	-94.0	-0.3	162.8	1589.6	1978.6	122.2
14 F-W	5:36: 5.5	5:36: 4.6	-65.3	-0.3	125.9	735.7	975.6	131.1
15 F-E	5:38: 6.0	5:38: 5.2	174.0	0.6	162.5	748.3	928.7	126.3
16 F-W	5:40:35.0	5:40:34.7	-38.5	-0.2	126.9	307.6	389.5	127.9
18 F-W	5:46:47.0	5:46:46.5	16.0	0.1	91.8	492.3	550.9	116.7
19 F-E	5:48:38.0	5:43:37.4	124.3	0.5	128.8	508.9	638.1	127.1
21 F-E	5:53:42.5	5:53:42.0	-59.3	-0.3	128.6	488.3	610.0	126.8
22 F-W	5:56:47.5	5:56:46.1	-223.0	-1.3	94.6	446.3	1561.0	163.4
23 F-E	5:59:14.5	5:59:13.9	-23.8	-0.1	127.4	542.2	640.9	122.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-2 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
FEB 6,1981

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-E	6: 8: 1.0	6: 8: 0.4	-58.7	-0.2	146.8	522.9	646.0	126.0
26 F-W	6:11:15.5	6:11:15.0	-183.3	-1.0	106.4	471.5	537.5	118.7
27 F-E	6:13:28.0	6:13:27.3	123.0	0.5	145.5	490.8	759.8	139.8
28 F-W	6:16:47.0	6:16:46.5	-165.3	-0.9	106.8	467.2	580.9	126.5
29 F-E	6:19: 7.5	6:19: 7.0	211.8	0.8	145.5	514.9	607.9	122.1
31 F-E	6:25:52.0	6:25:48.6	-69.0	-0.2	159.1	2596.8	3387.8	138.1
32 F-W	6:29:31.5	6:29:29.1	-180.2	-0.7	140.3	2513.7	2693.3	111.0
33 F-E	6:33: 7.5	6:33: 4.8	172.5	0.6	158.6	2600.3	3059.0	121.8
34 F-W	6:39: 9.0	6:39: 6.5	-98.5	-0.4	142.2	2048.4	2795.2	132.9
35 F-E	6:42:46.0	6:42:43.8	180.2	0.6	156.9	2050.5	2517.1	125.5
36 F-W	6:46:44.0	6:46:42.0	-108.2	-0.4	138.9	2083.4	2295.4	114.8
37 F-E	6:50: 9.5	6:50: 7.3	-93.5	-0.3	160.9	2115.9	2530.6	123.1
38 F-W	6:54: 4.5	6:54: 2.8	115.2	0.5	133.0	1961.5	1892.6	124.4
39 F-E	6:56:58.5	6:56:56.8	233.0	0.9	155.1	1559.3	1935.6	126.3
40 ARR	7: 0:48.5	7: 0:48.2	-669.3	-6.5	58.4	351.2	382.2	113.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C4-2 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
FEB 6,1981

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 DEP	7:26:56.5	7:26:56.2	1446.0	10.1	80.1	325.0	357.4	65.4
42 ARR	7:30:48.5	7:30:48.1	-615.5	-6.2	56.1	315.6	423.9	131.9
43 DEP	7:33: 1.0	7:33: 0.7	1665.2	12.3	75.3	354.1	403.4	61.4
44 ARR	7:36:46.5	7:36:46.1	-724.5	-7.2	56.5	333.7	422.6	127.9
46 ARR	7:43:27.5	7:43:27.2	-711.2	-7.4	54.2	336.5	349.4	105.6
47 DEP	7:45:34.5	7:45:34.2	2042.2	13.8	82.3	320.0	340.6	70.0
48 ARR	7:49:39.5	7:49:39.1	-744.0	-7.2	58.3	333.3	449.5	132.1
49 DEP	7:52: 2.0	7:52: 1.7	1966.3	12.9	84.5	336.6	358.9	69.7
51 DEP	7:58: 7.5	7:58: 7.2	1950.5	12.8	84.8	323.0	356.7	64.9
52 F-W	8: 1: 3.5	8: 1: 2.5	132.2	0.6	131.4	1063.7	1157.8	113.3
53 F-E	8: 3:27.5	8: 3:26.0	71.0	0.2	161.6	1090.4	1650.7	138.7
54 F-W	8: 6:25.5	8: 6:23.1	11.0	0.0	132.1	1073.4	2735.2	156.9
55 F-E	8: 8:25.0	8: 8:23.7	-309.0	-1.1	162.6	1030.4	1484.3	136.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPRCACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-3

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
FEB 6,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5: 3:46.0	5: 3:44.3	102.3	0.4	163.7	1112.7	1958.7	145.4
2 F-W	5: 6:21.0	5: 6:19.9	-123.8	-0.6	123.7	1036.1	1212.7	121.3
3 F-E	5: 8:31.5	5: 8:30.3	269.4	0.9	162.3	1074.3	1364.8	128.1
4 F-W	5:11:18.0	5:11:16.8	-39.0	-0.2	128.4	1065.8	1373.1	129.1
5 F-E	5:13:55.0	5:13:52.3	-95.8	-0.3	162.9	1623.6	3031.3	147.6
7 F-E	5:19: 5.5	5:19: 3.7	-301.0	-1.0	164.2	1627.8	2064.7	128.0
8 F-W	5:22: 2.0	5:22: 1.2	-210.8	-0.9	127.0	732.3	966.0	130.7
9 F-E	5:24:16.5	5:24:15.7	299.3	1.0	164.9	795.3	954.7	123.6
10 F-W	5:26:40.5	5:26:40.0	-11.7	-0.1	131.4	275.2	589.4	140.5
11 F-E	5:28:39.0	5:28:38.5	-111.7	-0.4	160.3	385.4	626.6	142.0
13 F-E	5:33:22.0	5:33:20.3	-64.5	-0.2	163.3	1587.6	1887.7	122.8
14 F-W	5:36: 1.0	5:36: 0.2	-127.5	-0.6	126.6	739.9	962.6	129.8
15 F-E	5:38: 9.5	5:38: 8.7	139.8	0.5	162.8	758.9	954.1	127.3
16 F-W	5:40:30.0	5:40:29.6	56.7	0.3	128.1	311.7	461.7	137.5
18 F-W	5:46:39.5	5:46:38.9	-70.2	-0.4	93.5	490.4	666.6	132.6
19 F-E	5:48:42.0	5:48:41.4	157.2	0.7	128.1	521.8	727.3	134.2
21 F-E	5:53:46.0	5:53:45.3	75.3	0.3	127.6	405.2	794.1	141.4
22 F-W	5:56:47.5	5:56:47.0	-223.0	-1.3	94.6	452.2	587.3	129.7
23 F-E	5:59:19.0	5:59:18.4	-183.0	-0.3	125.7	531.5	648.3	124.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C4-3 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
FEB 6,1981

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-E	6: 8: 4.5	6: 8: 3.8	-86.7	-0.3	147.5	517.6	733.5	135.1
26 F-W	6:11: 9.5	6:11: 9.0	-319.3	-1.7	105.9	487.2	600.0	126.8
27 F-E	6:13:32.5	6:13:31.9	220.2	0.9	144.3	506.0	669.7	130.9
28 F-W	6:16:41.0	6:16:40.4	-247.0	-1.3	107.2	434.5	669.5	133.6
29 F-E	6:19:11.5	6:19:10.9	274.3	1.1	143.5	538.5	632.7	121.7
31 F-E	6:26: 1.0	6:25:58.6	-127.0	-0.4	162.0	2380.3	2359.3	115.5
32 F-W	6:29:24.0	6:29:21.2	-130.0	-0.5	139.2	2823.0	3117.0	126.0
33 F-E	6:33: 6.5	6:33: 2.9	130.0	0.5	153.2	2601.9	4049.3	140.0
34 F-W	6:39: 6.5	6:39: 4.3	-254.8	-1.0	141.4	2630.1	2529.3	126.6
35 F-E	6:42:39.5	6:42:34.8	44.5	0.2	159.1	2316.5	5271.6	153.3
36 F-W	6:46:38.0	6:46:35.5	24.3	0.1	136.9	2091.5	2519.3	123.9
37 F-E	6:50:15.5	6:50:13.5	-197.2	-0.7	160.6	2102.2	2212.4	107.7
38 F-W	6:54: 0.0	6:53:58.3	26.3	0.1	124.3	1549.3	1915.8	124.0
39 F-E	6:57: 1.5	6:56:59.7	317.7	1.2	154.7	1592.8	2091.3	130.4
40 ARR	7: 0:35.5	7: 0:35.0	-555.3	-5.7	52.7	403.2	610.5	130.6

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-3 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
FEB 6,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 DEP	7:27: 1.0	7:27: 0.5	1144.7	7.2	89.8	473.1	524.1	115.5
42 ARR	7:30:37.5	7:30:37.0	-574.2	-6.2	52.0	418.8	524.7	127.1
43 DEP	7:33: 8.5	7:33: 8.0	1232.0	7.6	91.5	534.8	573.3	68.9
44 ARR	7:36:35.0	7:36:34.5	-569.3	-5.7	56.0	458.7	601.9	130.3
46 ARR	7:43:15.5	7:43:15.0	-641.5	-6.6	54.7	457.6	519.1	118.2
47 DEP	7:45:37.0	7:45:36.3	2118.8	14.1	83.4	558.9	766.4	133.2
48 ARR	7:49:28.0	7:49:27.5	-380.7	-3.9	55.7	459.7	616.6	131.8
49 DEP	7:52: 4.0	7:52: 3.3	1962.8	12.7	86.0	553.1	825.1	137.9
51 DEP	7:58: 9.5	7:58: 8.8	2028.8	13.1	85.9	548.6	783.1	135.5
52 F-W	8: 0:59.0	8: 0:58.0	121.5	0.5	131.6	1051.0	1155.4	114.5
53 F-E	8: 3:33.5	8: 3:32.4	40.8	0.1	161.2	1097.1	1198.1	113.7
54 F-W	8: 6:19.5	8: 6:16.8	-44.3	-0.2	131.7	1100.0	3104.6	159.2
55 F-E	8: 8:30.0	8: 8:29.0	137.0	0.5	161.6	1037.3	1158.1	119.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C4-4

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 4 SIDELINE NORTH, 4 FT

FAA/AEE 120
FEB 6,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5: 3:46.0	5: 3:44.6	102.3	0.4	163.7	1254.9	1622.9	129.4
2 F-W	5: 6:22.5	5: 6:21.3	-60.2	-0.3	124.0	1117.0	1378.2	125.9
3 F-E	5: 8:29.5	5: 8:28.2	314.2	1.1	163.5	1197.6	1510.3	127.5
4 F-W	5:11:19.5	5:11:18.1	-45.8	-0.2	129.1	1158.8	1571.7	132.5
5 F-E	5:13:58.5	5:13:56.8	-118.7	-0.4	163.1	1732.1	1935.2	116.5
7 F-E	5:19: 5.5	5:19: 3.8	-301.0	-1.0	164.2	1721.8	1869.3	112.9
8 F-W	5:22: 5.5	5:22: 4.7	-236.3	-1.0	127.6	880.1	951.4	112.3
9 F-E	5:24:14.5	5:24:13.5	306.2	1.1	164.6	990.7	1183.8	123.2
10 F-W	5:26:44.0	5:26:43.4	-98.5	-0.4	130.0	618.8	641.0	105.1
11 F-E	5:28:37.0	5:28:36.2	-175.8	-0.6	159.8	643.2	890.4	133.8
13 F-E	5:33:21.0	5:33:19.3	-119.0	-0.4	163.8	1700.2	1878.3	115.2
14 F-W	5:36: 3.5	5:36: 2.6	-79.5	-0.4	125.8	862.4	1042.7	124.2
15 F-E	5:38: 7.5	5:38: 6.5	143.5	0.5	162.2	928.6	1153.5	126.4
16 F-W	5:40:32.0	5:40:31.3	-2.7	-0.0	127.5	634.0	790.6	126.7
18 F-W	5:46:42.0	5:46:41.2	-7.7	-0.0	92.8	687.9	906.6	130.6
19 F-E	5:48:41.0	5:48:40.3	183.8	0.8	128.4	755.8	798.2	108.8
21 F-E	5:53:45.0	5 53:44.3	66.8	0.3	128.1	742.5	821.6	115.4
22 F-W	5:56:49.5	5:56:48.7	-144.5	-0.9	94.5	658.9	882.0	132.2
23 F-E	5:59:16.3	5:59:15.7	-45.3	-0.2	127.0	776.0	902.7	120.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C4-4 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 4 SIDELINE NORTH, 4 FT

FAA/AEE 120
FEB 6,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-E	6: 8: 3.5	6: 8: 2.8	-66.5	-0.3	147.2	772.7	829.0	111.2
26 F-W	6:11:11.5	6:11:10.7	-220.5	-1.2	105.6	675.5	859.0	128.1
27 F-E	6:13:31.0	6:13:30.3	228.3	0.9	144.9	741.5	819.1	115.1
28 F-W	6:16:43.5	6:16:42.8	-227.3	-1.2	108.1	674.2	846.8	127.2
29 F-E	6:19: 9.5	6:19: 8.7	255.2	1.0	144.3	801.1	880.1	114.5
31 F-E	6:25:55.0	6:25:51.7	-220.2	-0.8	160.7	2700.1	3726.2	133.6
32 F-W	6:29:29.0	6:29:26.5	-60.3	-0.2	139.2	2579.0	2788.5	112.4
33 F-E	6:33: 2.0	6:32:57.7	166.7	0.6	161.9	2704.4	4875.3	146.3
34 F-W	6:39:10.0	6:39: 7.9	32.2	0.1	142.7	2097.5	2365.9	117.6
35 F-E	6:42:44.5	6:42:41.6	216.2	0.8	158.2	2106.5	3313.2	140.5
36 F-W	6:46:43.0	6:46:41.0	-162.5	-0.7	138.6	2142.6	2247.3	107.6
37 F-E	6:50:12.5	6:50:10.4	-121.7	-0.4	160.9	2170.5	2415.2	116.0
38 F-W	6:54: 5.0	6:54: 3.5	202.8	0.9	132.6	1593.2	1650.0	105.1
39 F-E	6:57: 0.5	6:56:58.7	283.3	1.0	155.4	1673.8	2018.1	124.0
40 ARR	7: 0:40.0	7: 0:39.3	-593.3	-6.1	54.9	655.8	802.1	125.2

REC. TIME: TIME PNLTM WAS RECORDED, RAD. TIME: TIME PNLTM WAS RADIATED
R/C: AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG: CLIMB OR DESCENT ANGLE
GS: GROUND SPEED, CPA: CLOSEST POINT OF APPROACH
SR: SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG: ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C4-4 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
S76 FEB 6,1981
MIC # 4 SIDELINE NORTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM.	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 DEP	7:26:56.5	7:26:55.8	1446.0	10.1	80.1	667.9	781.0	121.2
42 ARR	7:30:37.0	7:30:36.0	-590.8	-6.4	51.6	624.6	1086.2	144.9
43 DEP	7:33: 1.5	7:33: 0.8	1610.5	11.8	76.4	678.3	740.0	113.6
44 ARR	7:36:39.5	7:36:38.8	-734.3	-7.3	56.8	611.3	752.2	125.6
46 ARR	7:43:19.0	7:43:18.3	-622.2	-6.4	54.7	648.1	764.7	122.0
47 DEP	7:45:35.5	7:45:34.9	2071.5	13.8	83.0	639.9	693.8	112.7
48 ARR	7:49:33.5	7:49:32.8	-749.3	-7.6	55.5	621.3	741.9	123.1
49 DEP	7:52: 4.0	7:52: 3.4	1962.8	12.7	86.0	654.6	664.3	99.8
51 DEP	7:58: 8.0	7:58: 7.4	1954.8	12.8	84.9	638.5	713.7	116.5
52 F-W	8: 1: 2.0	8: 1: 1.0	146.2	0.6	131.0	1107.0	1145.4	104.9
53 F-E	8: 3:31.5	8: 3:30.3	43.5	0.2	160.8	1256.2	1375.5	114.0
54 F-W	8: 6:24.0	8: 6:21.7	-165.3	-0.7	132.7	1166.8	2574.9	153.1
55 F-E	8: 8:27.5	8: 8:26.2	-108.0	-0.4	162.0	1177.7	1445.7	125.5

REC. TIME: TIME PNLTM WAS RECORDED, RAD. TIME: TIME PNLTM WAS RADIATED
R/C: AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG: CLIMB OR DESCENT ANGLE
GS: GROUND SPEED, CPA: CLOSEST POINT OF APPROACH
SR: SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG: ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-5 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 5 SIDELINE SOUTH, 4 FT

FAA/AEE 120
FEB 6,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-E	6: 8: 4.0	6: 8: 3.4	-74.3	-0.3	147.3	693.0	708.0	101.8
26 F-W	6:11:12.5	6:11:11.8	-192.0	-1.0	106.3	696.5	775.1	116.0
27 F-E	6:13:30.5	6:13:29.8	222.3	0.9	145.1	654.9	806.7	125.7
28 F-W	6:16:45.0	6:16:44.3	-189.2	-1.0	106.7	692.6	742.0	111.0
29 F-E	6:19: 9.0	6:19: 8.3	258.0	1.0	144.7	629.4	805.0	128.6
31 F-E	6:26: 0.0	6:25:57.6	-194.0	-0.7	161.6	2562.3	2738.4	110.7
32 F-W	6:29:27.0	6:29:24.3	-121.3	-0.5	140.4	2552.7	3014.8	122.1
33 F-E	6:33:10.5	6:33: 8.0	234.5	0.8	158.8	2625.4	2884.2	114.5
34 F-W	6:39: 8.5	6:39: 6.2	-104.3	-0.4	141.1	2093.7	2571.2	125.5
35 F-E	6:42:48.0	6:42:45.8	236.8	0.9	157.6	2116.0	2543.5	123.7
36 F-W	6:46:42.0	6:46:39.9	-145.8	-0.6	138.4	2141.9	2356.9	114.7
37 F-E	6:50:10.0	6:50: 7.5	-99.3	-0.3	160.9	2173.1	2806.2	129.2
38 F-W	6:54: 1.5	6:53:59.6	16.2	0.1	133.4	1666.5	2125.4	128.4
39 F-E	6:56:59.5	6:56:57.6	237.0	0.9	155.4	1612.4	2151.8	131.5
40 ARR	7: 0:38.5	7: 0:37.7	-610.2	-6.2	55.0	624.3	885.1	135.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-5 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
S76 FEB 6,1981
MIC # 5 SIDELINE SOUTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 DEP	7:26:58.5	7:26:57.9	1274.5	8.5	84.3	647.3	653.7	98.0
42 ARR	7:30:40.5	7:30:39.8	-624.0	-6.6	52.9	602.1	825.7	133.2
43 DEP	7:33: 2.5	7:33: 1.9	1528.5	10.9	78.3	666.1	677.7	100.6
44 ARR	7:36:44.5	7:36:43.9	-666.5	-6.7	55.8	652.4	652.4	90.7
46 ARR	7:43:24.0	7:43:23.5	-738.7	-7.6	54.8	621.4	622.4	86.7
47 DEP	7:45:36.0	7:45:35.4	2086.2	13.9	83.1	675.9	698.8	104.7
48 ARR	7:49:25.5	7:49:24.3	-330.2	-3.4	55.7	677.8	1378.5	150.5
49 DEP	7:52: 4.0	7:52: 3.4	1962.8	12.7	86.0	676.8	684.6	98.7
51 DEP	7:58: 9.0	7:58: 8.4	2003.8	13.0	85.6	668.2	681.8	101.5
52 F-W	8: 1: 1.0	8: 0:59.2	107.2	0.5	131.9	1222.6	1343.2	114.5
53 F-E	8: 3:29.5	8: 3:28.0	67.5	0.2	160.9	1137.6	1663.1	136.8
54 F-W	8: 6:21.0	8: 6:18.0	238.5	1.0	128.7	1259.6	3345.9	157.9
55 F-E	8: 8:28.0	8: 8:26.8	-30.7	-0.1	161.7	1104.3	1303.0	122.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-6

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 6 SIDELINE NORTH, 4 FT

FAA/AEE 120
FEB 6,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
11 F-E	5:28:38.0	5:28:37.0	-142.3	-0.5	160.1	1028.4	1108.0	111.9
13 F-E	5:33:19.5	5:33:17.5	-98.2	-0.3	163.6	1904.9	2309.9	124.4
14 F-W	5:36: 2.5	5:36: 1.2	-88.5	-0.4	125.7	1154.2	1449.6	127.2
15 F-E	5:38: 7.0	5:38: 5.6	152.5	0.5	162.0	1238.2	1539.6	126.5
16 F-W	5:40:33.5	5:40:32.6	-42.3	-0.2	126.6	1041.0	1077.7	105.0
18 F-W	5:46:43.0	5:46:42.0	44.7	0.3	92.8	1043.2	1147.6	114.6
19 F-E	5:48:37.5	5:48:36.1	112.5	0.5	128.6	1119.6	1533.8	136.7
21 F-E	5:53:43.0	5:53:41.7	-56.3	-0.2	128.5	1112.7	1426.7	128.7
22 F-W	5:56:52.5	5:56:51.6	-76.2	-0.5	94.7	1018.1	1026.5	97.4
23 F-E	5:59:16.5	5:59:15.4	-45.3	-0.2	127.0	1134.3	1256.7	115.5

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-6 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
S76 FEB 5,1981
MIC # 6 SIDELINE NORTH, 4 FT

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-E	6: 8: 2.5	6: 8: 1.4	-39.7	-0.2	147.0	1095.1	1269.0	120.3
26 F-W	6:11:13.5	6:11:12.6	-160.5	-0.9	105.5	1033.5	1053.2	101.1
27 F-E	6:13:31.0	6:13:30.0	226.3	0.9	144.9	1108.4	1187.3	111.0
28 F-W	6:16:45.0	6:16:44.1	-189.2	-1.0	106.7	1033.3	1066.3	104.3
29 F-E	6:19: 9.0	6:19: 7.8	258.0	1.0	144.7	1172.9	1303.8	115.9
31 F-E	6:25:57.5	6:25:54.5	-220.8	-0.8	160.8	2870.2	3415.5	122.8
32 F-W	6:29:31.5	6:29:29.1	-180.2	-0.7	140.3	2708.6	2753.6	100.4
33 F-E	6:32:59.5	6:32:54.4	-40.2	-0.1	162.5	3006.3	5732.2	148.4
34 F-W	6:39:12.5	6:39:10.5	254.7	1.0	141.6	2243.1	2288.2	101.4
35 F-E	6:42:50.5	6:42:48.4	54.2	0.2	157.2	2245.8	2371.9	108.8
36 F-W	6:46:43.0	6:46:40.9	-162.5	-0.7	138.6	2283.8	2382.0	106.5
37 F-E	6:50:11.0	6:50: 8.5	-118.7	-0.4	161.1	2302.7	2798.2	124.4
38 F-W	6:54: 2.0	6:54: 0.1	61.8	0.3	133.4	1745.3	2118.6	124.4
39 F-E	6:57: 3.5	6:57: 1.8	330.3	1.2	153.3	1875.2	1903.6	99.9
40 ARR	7: 0:39.0	7: 0:38.0	-618.3	-6.4	54.7	1035.5	1186.3	119.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-6 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC # 6 SIDELINE NORTH, 4 FT

FAA/AEE 120
FEB 6,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 DEP	7:27: 2.0	7:27: 1.1	1103.5	6.8	91.8	1007.0	1060.6	71.7
42 ARR	7:30:36.0	7:30:34.8	-618.2	-6.7	52.1	1013.5	1418.5	134.4
43 DEP	7:32:52.0	7:32:50.3	1366.3	10.1	75.8	1070.6	1917.2	146.1
44 ARR	7:36:41.5	7:36:40.6	-673.0	-6.8	55.7	987.3	1018.7	104.3
46 ARR	7:43:16.0	7:43:14.9	-637.8	-6.6	54.7	1028.6	1247.3	124.4
47 DEP	7:45:35.0	7:45:34.0	2064.5	13.8	82.9	1006.3	1084.0	111.8
48 ARR	7:49:35.0	7:49:34.1	-759.8	-7.6	56.0	1000.2	1039.0	105.7
49 DEP	7:52: 3.5	7:52: 2.6	1970.7	12.8	85.5	1019.3	1048.6	103.6
51 DEP	7:58:12.5	7:58:11.6	2206.0	14.3	85.4	1007.3	1049.3	73.7
52 F-W	8: 1: 1.0	8: 0:59.7	107.2	0.5	131.9	1315.3	1436.0	113.7
53 F-E	8: 3:32.0	8: 3:30.6	35.0	0.1	161.1	1526.0	1592.5	106.6
54 F-W	8: 6:20.5	8: 6:17.3	129.7	0.6	130.4	1471.9	3553.7	155.5
55 F-E	8: 8:23.0	8: 8:20.5	-390.7	-1.4	161.3	1444.2	2799.0	148.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-7

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
876 FEB 6,1981
MIC #1G CENTERLINE CENTER, GROUND

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5: 3:46.5	5: 3:45.3	81.5	0.3	163.9	1113.1	1397.4	127.2
2 F-W	5: 6:21.5	5: 6:20.2	-106.2	-0.5	124.2	1038.4	1484.3	135.6
3 F-E	5: 8:29.5	5: 8:28.3	314.2	1.1	163.5	1067.3	1403.6	130.5
4 F-W	5:11:20.0	5:11:18.8	-77.7	-0.3	128.9	1067.0	1415.6	131.1
5 F-E	5:13:56.0	5:13:54.0	-73.5	-0.3	163.4	1631.9	2295.2	134.7
7 F-E	5:19: 3.5	5:19: 1.6	-238.8	-0.8	164.0	1640.4	2114.8	129.1
8 F-W	5:22: 4.0	5:22: 3.1	-269.8	-1.2	127.8	725.2	1009.3	134.1
9 F-E	5:24:14.5	5:24:13.6	306.2	1.1	164.6	789.4	996.6	127.6
10 F-W	5:26:43.0	5:26:42.5	-48.0	-0.2	129.3	370.3	534.7	135.3
11 F-E	5:28:37.5	5:28:37.0	-169.3	-0.6	160.0	391.2	556.4	135.3
13 F-E	5:33:19.5	5:33:17.7	-98.2	-0.3	163.6	1592.1	2028.4	128.3
14 F-W	5:36: 3.0	5:36: 2.1	-85.8	-0.4	126.1	740.6	1010.0	132.8
15 F-E	5:38: 7.0	5:38: 6.0	152.5	0.5	162.0	757.9	1107.2	136.8
16 F-W	5:40:32.5	5:40:32.1	-29.3	-0.1	127.0	313.7	421.7	131.9
18 F-W	5:46:44.0	5:16:43.5	34.6	0.2	92.6	495.8	541.1	113.6
19 F-E	5:48:39.5	5:48:38.8	137.5	0.6	129.3	518.2	772.8	137.9
21 F-E	5:53:44.0	5:53:43.3	0.7	0.0	128.3	493.5	743.2	138.4
22 F-W	5:56:50.5	5:56:50.0	-92.3	-0.8	94.9	451.8	595.1	130.6
23 F-E	5:59:16.0	5:59:15.3	-46.8	-0.2	126.9	545.4	761.3	134.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C4-7 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
S76 FEB 6,1981
MIC #1G CENTERLINE CENTER, GROUND

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-E	6: 8: 2.5	6: 8: 1.8	-39.7	-0.2	147.0	524.4	740.8	134.9
26 F-W	6:11:12.5	6:11:12.0	-192.0	-1.0	106.3	482.2	570.1	122.2
27 F-E	6:13:30.5	6:13:29.9	222.3	0.9	145.1	501.3	666.6	131.2
28 F-W	6:16:45.0	6:16:44.5	-189.2	-1.0	106.7	478.4	523.9	114.1
29 F-E	6:19: 9.0	6:19: 8.4	258.0	1.0	144.7	530.4	705.0	131.2
31 F-E	6:25:56.5	6:25:53.6	-166.5	-0.6	160.8	2589.8	3313.2	128.6
32 F-W	6:29:25.5	6:29:22.7	-222.2	-0.9	141.0	2522.3	3224.9	128.5
33 F-E	6:33: 8.0	6:33: 5.1	188.0	0.7	158.2	2608.1	3299.5	127.8
34 F-W	6:39: 8.5	6:39: 6.3	-104.3	-0.4	141.1	2041.0	2524.4	126.0
35 F-E	6:42:47.0	6:42:44.6	198.2	0.7	157.2	2057.3	2687.0	130.0
36 F-W	6:46:38.5	6:46:36.0	34.2	0.1	136.8	2089.0	2779.8	131.3
37 F-E	6:50:12.0	6:50: 9.9	-118.7	-0.4	160.2	2119.4	2418.5	118.8
38 F-W	6:54: 1.5	6:53:59.7	16.2	0.1	133.4	1558.3	2026.7	129.7
39 F-E	6:57: 1.0	6:56:59.4	272.7	1.0	154.9	1572.0	1838.3	121.2
40 ARR	7: 0:45.0	7: 0:44.6	-623.0	-6.6	53.3	414.0	414.4	87.4

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-7 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
S76 FEB 6,1981
MIC #1G CENTERLINE CENTER, GROUND

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 DEP	7:26:57.5	7:26:57.1	1355.0	9.3	81.8	412.4	467.9	118.2
42 ARR	7:30:42.0	7:30:41.5	-613.2	-6.5	53.3	370.6	547.4	137.4
43 DEP	7:33: 5.0	7:33: 4.6	1292.7	8.7	83.5	462.6	508.5	65.5
44 ARR	7:36:41.5	7:36:41.1	-673.0	-6.8	55.7	401.1	467.2	120.9
46 ARR	7:43:23.0	7:43:22.6	-700.7	-7.3	54.2	406.1	406.9	93.7
47 DEP	7:45:35.0	7:45:34.5	2064.5	13.8	82.9	441.2	536.4	124.7
48 ARR	7:49:35.0	7:49:34.6	-759.8	-7.6	56.0	398.7	471.3	122.2
49 DEP	7:52: 3.5	7:52: 3.1	1970.7	12.8	85.5	452.8	478.8	109.0
51 DEP	7:58: 8.5	7:58: 8.1	1972.7	12.8	85.4	434.3	477.2	114.5
52 F-W	8: 1: 1.5	8: 1: 0.5	146.3	0.6	130.8	1061.3	1134.8	110.7
53 F-E	8: 3:29.5	8: 3:28.1	67.5	0.2	160.9	1096.8	1611.3	137.1
54 F-W	8: 6:21.5	8: 6:18.7	228.3	1.0	128.2	1114.0	3164.6	159.4
55 F-E	8: 8:27.5	8: 8:26.3	-108.0	-0.4	162.0	1034.4	1318.2	128.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C4-8

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
FEB 6,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5: 3:45.5	5: 3:44.1	87.7	0.3	164.4	1080.1	1591.1	137.2
2 F-W	5: 6:22.0	5: 6:20.8	-68.0	-0.3	123.9	1005.4	1370.4	132.8
3 F-E	5: 8:29.5	5: 8:28.3	314.2	1.1	163.5	1034.2	1375.4	131.2
4 F-W	5:11:20.0	5:11:18.8	-77.7	-0.3	128.9	1034.1	1387.9	131.8
5 F-E	5:13:56.0	5:13:54.0	-73.5	-0.3	163.4	1599.0	2267.9	135.2
7 F-E	5:19: 3.5	5:19: 1.7	-238.8	-0.8	164.0	1607.5	2085.5	129.6
8 F-W	5:22: 4.0	5:22: 3.1	-269.8	-1.2	127.8	692.2	982.2	135.2
9 F-E	5:24:14.5	5:24:13.6	306.2	1.1	164.6	756.9	968.0	128.6
10 F-W	5:26:43.0	5:26:42.6	-48.0	-0.2	129.3	343.3	508.7	137.6
11 F-E	5:28:37.0	5:28:36.4	-175.8	-0.6	159.8	358.2	653.4	147.0
13 F-E	5:33:19.5	5:33:17.7	-98.2	-0.3	163.6	1559.2	1997.5	128.7
14 F-W	5:36: 3.0	5:36: 2.1	-85.8	-0.4	126.1	707.6	982.5	134.0
15 F-E	5:38: 7.5	5:38: 6.7	148.5	0.5	162.2	725.0	965.5	131.3
16 F-W	5:40:32.0	5:40:31.6	-2.7	-0.0	127.5	281.5	495.9	145.4
18 F-W	5:46:43.5	5:46:43.0	39.8	0.2	92.6	462.8	551.4	122.9
19 F-E	5:48:40.0	5:48:39.4	131.8	0.6	128.7	485.5	656.2	132.3
21 F-E	5:53:44.5	5:53:44.0	41.3	0.2	128.4	460.9	624.6	132.5
22 F-W	5:56:50.5	5:56:50.0	-92.3	-0.6	94.9	415.9	568.0	132.5
23 F-E	5:59:16.0	5:59:15.4	-46.8	-0.2	126.9	512.7	735.1	135.8

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

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                                TABLE C4-8 (CONT)

                                       POSITION DATA
                          HELICOPTER NOISE MEASURMENT PROGRAM
TEST DATE:   JUNE 25,1980                                                     FAA/AEE 120
             S76                                                              FEB  6,1981
             MIC #1H CENTERLINE CENTER, 33FT
*************************************************************************************

 EVENT        RECORDED      RADIATED       R/C      C/D-ANG    GS       CPA       SR     AR-ANG
                TIME          TIME         FPM        DEG     KNOTS      FT        FT      DEG

25 F-E       6: 8: 2.5    6: 8: 1.9     -39.7      -0.2     147.0    491.5     714.2   136.5
26 F-W       6:11:12.0    6:11:11.5    -211.8      -1.1     106.3    449.2     601.3   131.7
27 F-E       6:13:30.5    6:13:29.9     222.3       0.9     145.1    468.6     637.6   132.7
28 F-W       6:16:44.5    6:16:44.0    -193.3      -1.0     106.7    445.5     540.4   124.5
29 F-E       6:19: 9.0    6:19: 8.4     258.0       1.0     144.7    498.4     678.2   132.7
31 F-E       6:25:55.5    6:25:52.4    -215.2      -0.8     180.7   2557.1    3485.4   132.8
32 F-W       6:29:25.0    6:29:22.1    -305.5      -1.2     141.7   2489.3    3266.5   130.4
33 F-E       6:33: 7.0    6:33: 3.9     153.7       0.5     153.8   2575.2    3474.7   132.2
34 F-W       6:39: 8.0    6:39: 5.7    -155.0      -0.6     141.3   2008.0    2589.2   129.1
35 F-E       6:42:46.5    6:42:44.1     193.0       0.7     157.6   2024.3    2761.2   132.9
36 F-W       6:46:37.5    6:46:34.9     -33.7      -0.1     136.6   2056.0    2951.0   135.8
37 F-E       6:50: 9.5    6:50: 7.0     -99.5      -0.3     100.9   2086.4    2857.5   133.1
38 F-W       6:54: 2.3    6:54: 0.3      61.8       0.3     133.4   1525.4    1914.6   127.2
39 F-E       6:57: 0.5    6:56:58.8     283.3       1.0     155.4   1539.1    1891.1   125.5
40 ARR       7: 0:42.0    7: 0:41.6    -618.8      -6.4      54.3    381.2     458.1   123.7




REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED,  CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE
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BEST DOCUMENT AVAILABLE

TABLE C4-8 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
FEB 6,1981

****

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41	DEP	7:26:57.0	7:26:56.6	1380.3	9.6	80.6	379.8	482.1	128.0
42	ARR	7:30:42.5	7:30:42.1	-595.7	-6.3	53.4	337.8	484.3	135.8
43	DEP	7:33: 2.0	7:33: 1.6	1560.7	11.3	77.5	430.2	470.1	113.8
44	ARR	7:36:41.0	7:36:40.6	-690.0	-7.0	55.8	368.4	465.0	127.6
46	ARR	7:43:23.0	7:43:22.7	-700.7	-7.3	54.8	373.4	373.8	92.8
47	DEP	7:45:35.5	7:45:35.1	2071.5	13.8	83.0	409.2	472.8	120.1
48	ARR	7:49:36.0	7:49:35.7	-763.3	-7.6	56.4	366.0	394.5	111.9
49	DEP	7:52: 2.0	7:52: 1.5	1966.3	12.9	84.5	420.7	576.2	133.1
51	DEP	7:58: 8.5	7:58: 8.1	1972.7	12.8	85.4	402.2	449.9	116.6
52	F-W	8: 1: 0.0	8: 0:58.9	104.5	0.4	131.7	1628.6	1290.7	127.2
53	F-E	8: 3:29.0	8: 3:27.5	78.5	0.3	161.3	1064.1	1707.9	141.5
54	F-W	8: 6:21.0	8: 6:18.1	233.5	1.0	128.7	1112.3	3277.2	160.2
55	F-E	8: 8:26.5	8: 8:25.2	-244.5	-0.9	162.5	1001.5	1525.3	139.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

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TABLE C4-9

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
S76 FEB 6,1981
MIC #G5 SIDELINE SOUTH, GROUND

****

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1	F-E	5: 3:47.0	5: 3:45.8	56.0	0.2	163.3	1196.3	1392.4	120.8
2	F-W	5: 6:24.5	5: 6:23.4	-0.8	-0.0	127.0	1174.3	1249.8	110.0
3	F-E	5: 8:30.5	5: 8:29.3	240.3	0.8	161.9	1144.2	1314.2	119.5
4	F-W	5:11:20.5	5:11:19.2	-73.0	-0.3	128.6	1187.5	1455.6	125.3
5	F-E	5:13:57.5	5:13:55.7	-125.8	-0.4	163.9	1671.9	2008.5	123.7
7	F-E	5:19: 5.0	5:19: 3.3	-292.2	-1.0	163.9	1699.5	1915.9	117.5
8	F-W	5:22: 6.0	5:22: 5.2	-217.5	-1.0	127.8	869.0	905.6	106.3
9	F-E	5:24:15.0	5:24:14.1	319.7	1.1	164.9	861.8	979.0	118.3
10	F-W	5:26:43.5	5:26:42.9	-61.8	-0.3	129.7	617.3	693.3	117.1
11	F-E	5:28:37.5	5:28:36.8	-169.3	-0.6	160.0	611.0	747.9	125.2
13	F-E	5:33:21.0	5:33:19.4	-119.0	-0.4	163.8	1627.9	1814.0	116.2
14	F-W	5:36: 3.5	5:36: 2.5	-79.5	-0.4	125.8	911.7	1087.4	123.0
15	F-E	5:38: 7.5	5:38: 6.5	148.5	0.5	162.2	874.5	1102.2	127.5
16	F-W	5:40:32.0	5:40:31.4	-2.7	-0.0	127.5	525.9	681.6	129.5
18	F-W	5:46:44.5	5:46:43.9	31.1	0.2	92.6	706.1	722.7	102.3
19	F-E	5:48:39.5	5:48:38.7	137.5	0.6	129.3	667.9	891.0	131.4
21	F-E	5:53:44.5	5:53:43.8	41.3	0.2	128.4	644.9	791.2	125.4
22	F-W	5:56:52.0	5:56:51.4	-99.3	-0.6	94.8	620.1	697.1	102.7
23	F-E	5:59:16.0	5:59:15.2	-46.3	-0.2	126.9	687.1	874.0	123.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C4-9 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
FEB 6,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
25 F-E	6: 8: 3.5	6: 8: 2.8	-66.5	-0.3	147.2	696.0	748.4	111.6
26 F-W	6:11:13.5	6:11:12.5	-160.5	-0.9	105.5	599.2	717.6	103.0
27 F-E	6:13:31.0	6:13:30.3	226.3	0.9	144.9	657.9	736.6	116.7
28 F-W	6:16:45.5	6:16:44.9	-216.8	-1.1	108.9	695.3	715.7	103.7
29 F-E	6:19: 9.0	6:19: 8.3	258.0	1.0	144.7	632.7	807.5	128.4
31 F-E	6:26: 0.0	6:25:57.6	-194.0	-0.7	161.8	2586.3	2742.2	110.6
32 F-W	6:29:26.0	6:29:23.2	-159.8	-0.6	140.2	2556.7	3181.2	126.5
33 F-E	6:33:10.0	6:33: 7.4	247.5	0.9	158.7	2629.4	2952.2	117.0
34 F-W	6:39: 8.0	6:39: 5.6	-155.0	-0.6	141.3	2097.6	2670.3	128.2
35 F-E	6:42:47.0	6:42:44.6	198.2	0.7	157.2	2119.9	2732.9	129.1
36 F-W	6:46:38.5	6:46:36.0	34.2	0.1	136.8	2145.8	2841.7	131.0
37 F-E	6:50:14.0	6:50:12.0	-157.5	-0.6	160.3	2177.0	2247.9	104.4
38 F-W	6:54: 4.0	6:54: 2.4	105.7	0.4	133.0	1670.2	1802.6	112.1
39 F-E	6:57: 0.0	6:56:58.2	259.0	0.9	155.6	1616.3	2056.5	128.2
40 ARR	7: 0:47.5	7: 0:46.9	-622.5	-6.7	52.0	626.9	663.0	71.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C4-9 (CONT)

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
S76
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
FEB 6,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
41 DEP	7:27: 1.5	7:27: 0.9	1117.5	6.9	90.6	649.7	724.6	63.7
42 ARR	7:30:45.5	7:30:45.0	-565.7	-5.9	54.4	604.6	612.1	99.0
43 DEP	7:33: 6.0	7:33: 5.3	1222.5	8.0	85.6	668.8	748.6	63.3
44 ARR	7:36:44.5	7:36:43.9	-666.5	-6.7	55.8	654.8	654.8	90.9
46 ARR	7:43:26.5	7:43:25.9	-732.0	-7.6	54.5	623.9	675.3	67.5
47 DEP	7:45:36.0	7:45:35.4	2086.2	13.9	83.1	678.4	701.3	104.7
48 ARR	7:49:37.0	7:49:36.4	-770.2	-7.7	56.5	642.3	648.1	97.6
49 DEP	7:52: 5.0	7:52: 4.4	1923.5	12.3	87.2	679.4	681.6	85.3
52 F-W	8: 0:59.0	8: 0:57.6	121.5	0.5	131.6	1226.0	1618.5	130.8
53 F-E	8: 3:30.0	8: 3:28.6	50.3	0.2	161.3	1141.5	1550.2	132.6
54 F-W	8: 6:21.0	8: 6:18.0	238.5	1.0	128.7	1263.0	3349.2	157.8
55 F-E	8: 8:28.0	8: 8:26.2	-30.7	-0.1	161.7	1103.0	1307.7	122.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

Sub-Appendix C5 Summary
UH60A June 25, 1980
Flight Path Tracking Plots And Position Data

1. FLIGHT PATH TRACKING PLOTS

Event No.	Plot Fig No.	Operation			
56	C5-1	300 Ft.	LFO	152 kts	Target Speed
57	"	"		"	"
58	"	"		"	"
59	"	"		"	"
60	C5-2	700 Ft.	LFO	152 kts	Target Speed
62	"	"		"	"
63	"	"		"	"
64	C5-3	1000 Ft.	LFO	152 kts	Target Speed
66	"	"		"	"
67	"	"		"	"
68	C5-4	1500 Ft.	LFO	152 kts	Target Speed
69	"	"		"	"
70	"	"		"	"
71	"	"		"	"
73	C5-5	2000 Ft.	LFO	152 kts	Target Speed
74	"	"		"	"
75	"	"		"	"
76	C5-6	2500 Ft.	LFO	152 kts	Target Speed

2. POSITION DATA TABLES

Table No.	Microphone
C5-1	Mic. 1, Centerline Center 4 ft.
C5-2	Mic. 2, Centerline 150m West 4 ft.
C5-3	Mic. 3, Centerline 150m East 4 ft.
C5-4	Mic. 4, Centerline 164m North 4 ft.
C5-5	Mic. 5, Sideline 150m South 4 ft.
C5-6	Mic. 6, Sideline 284m North 4 ft.
C5-7	Mic. 1G, Centerline Center (Ground)
C5-8	Mic. 1H, Centerline Center 33 ft.
C5-9	Mic. 5G, Sideline 150m South (Ground)

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FIGURE C5-1

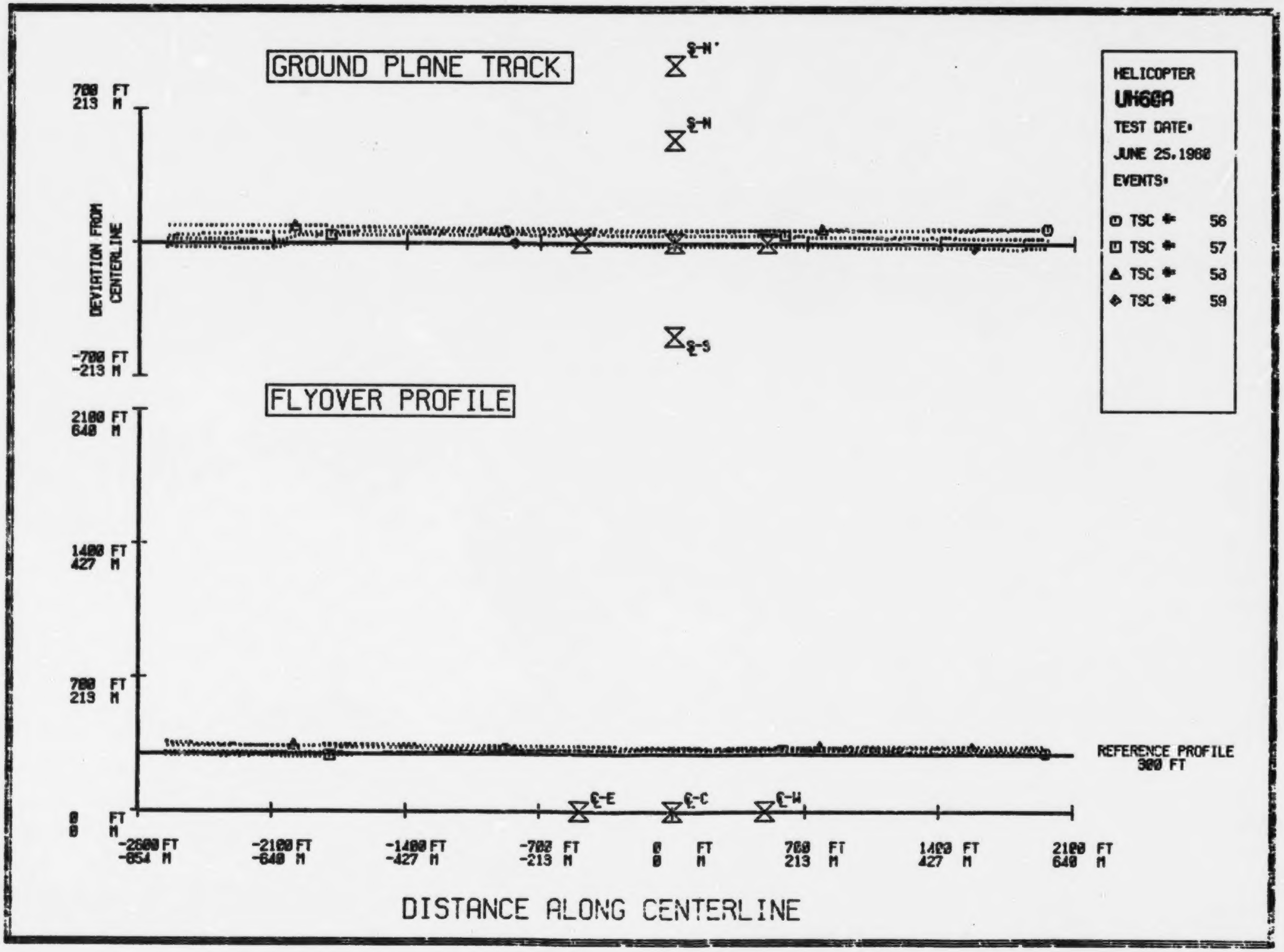

GROUND PLANE TRACK
FLYOVER PROFILE
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
℄-N'
℄-N
℄-S
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
℄-E
℄-C
℄-W
REFERENCE PROFILE 300 FT
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 25,1980
EVENTS:
TSC # 56
TSC # 57
TSC # 58
TSC # 59

FIGURE C5-2

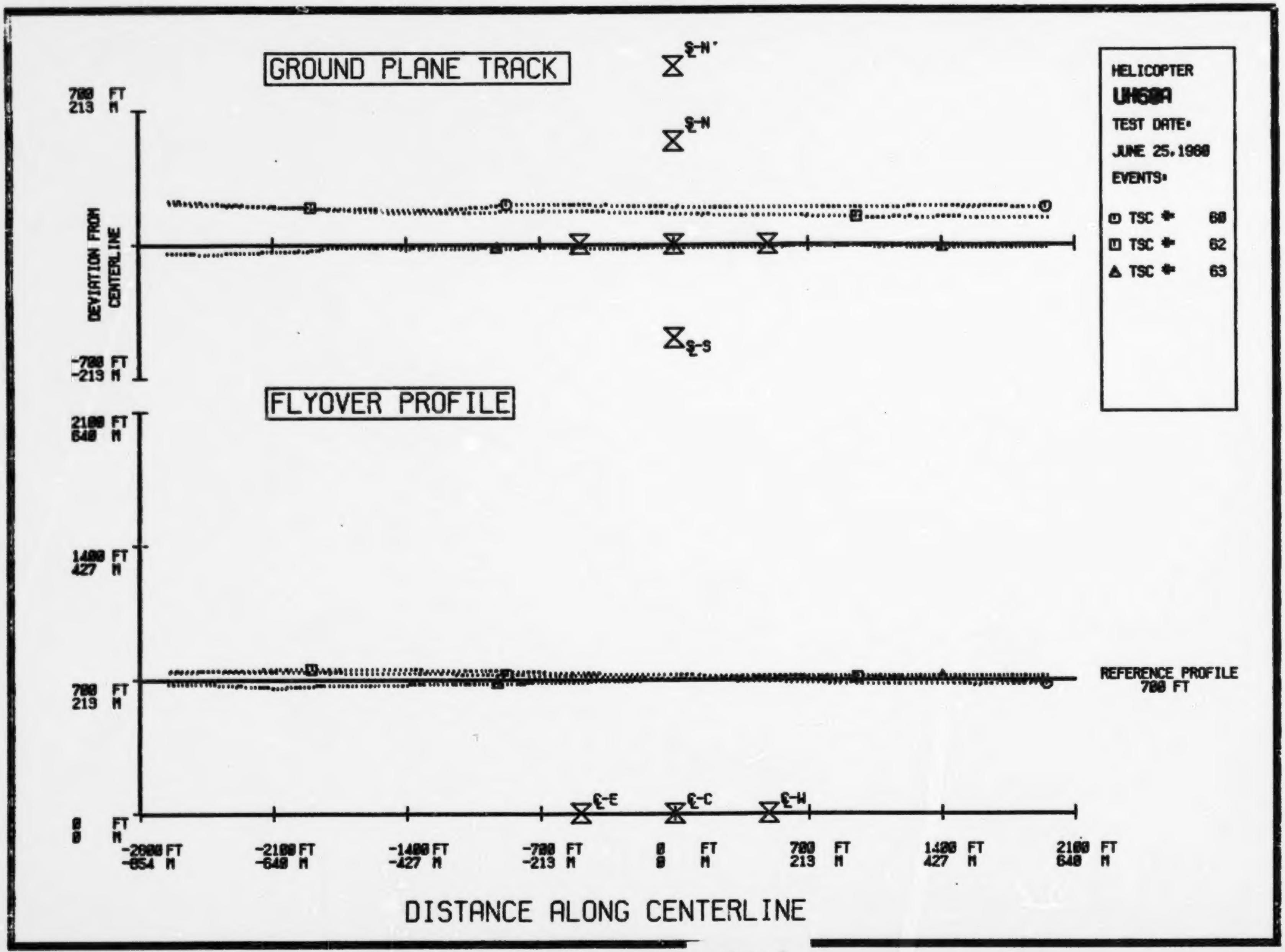
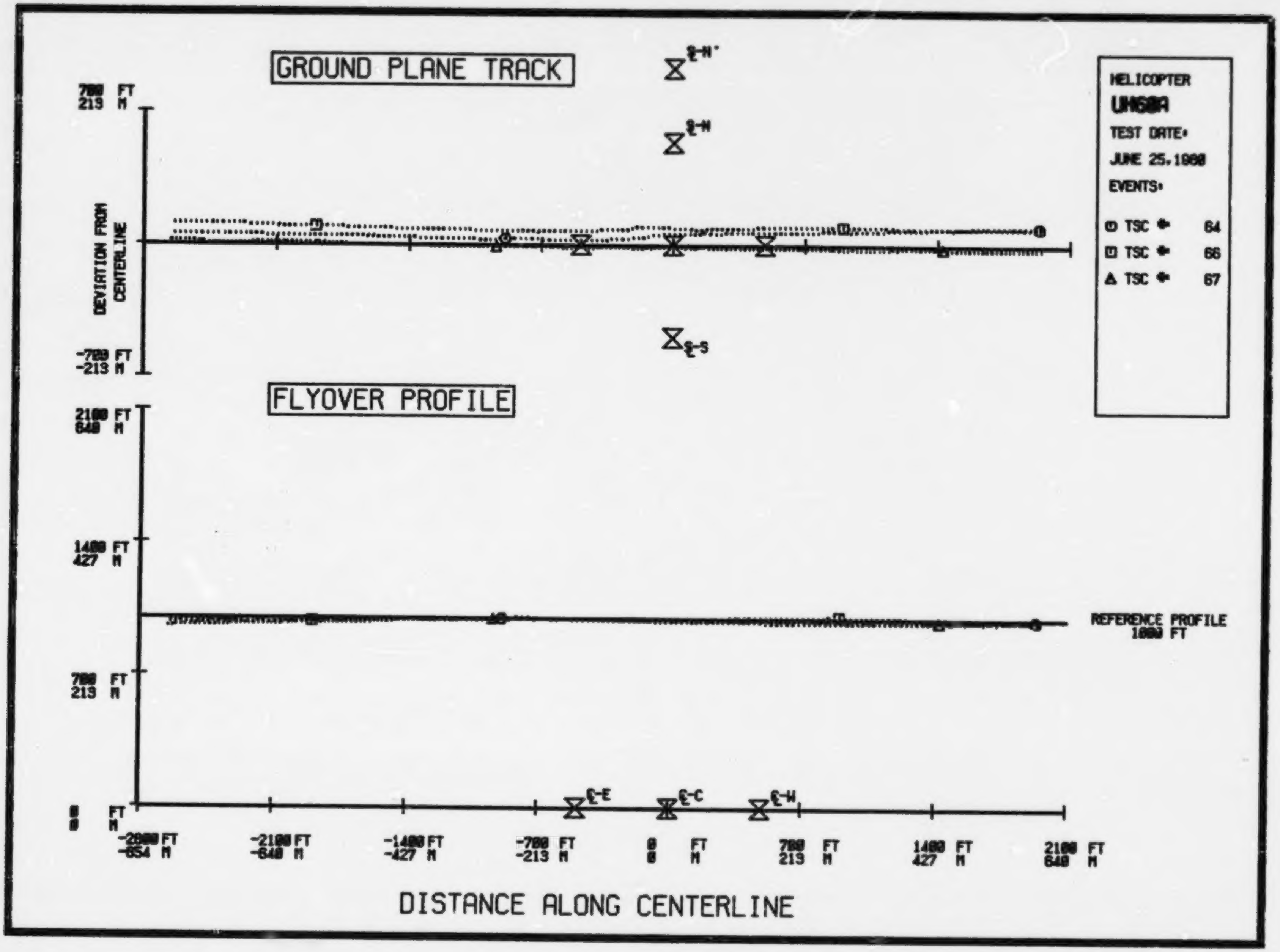

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
℄-E
℄-C
℄-W
REFERENCE PROFILE 700 FT
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 25, 1980
EVENTS:
○ TSC # 60
□ TSC # 62
△ TSC # 63

FIGURE C5-3



BEST DOCUMENT AVAILABLE

FIGURE C5-4

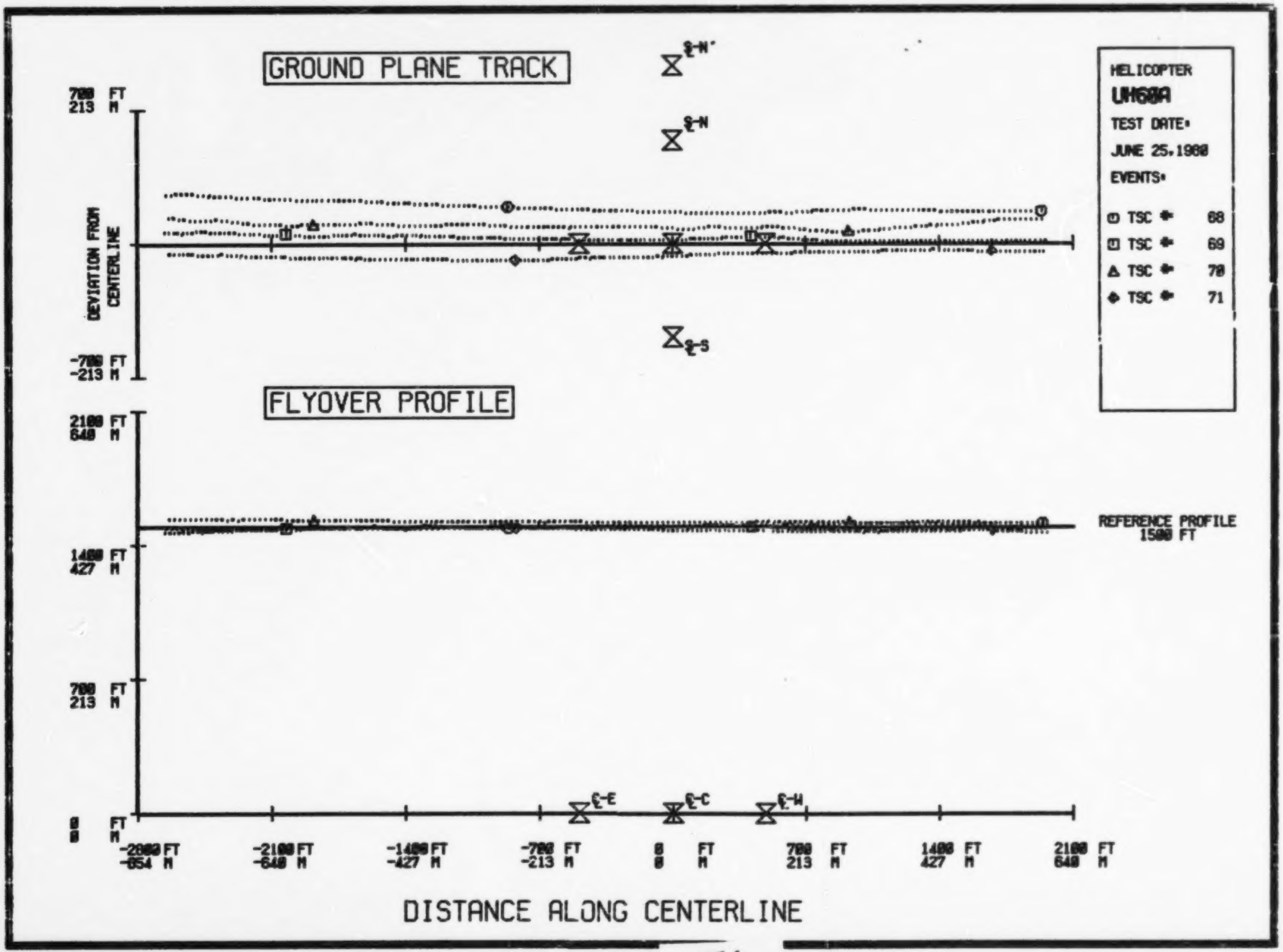
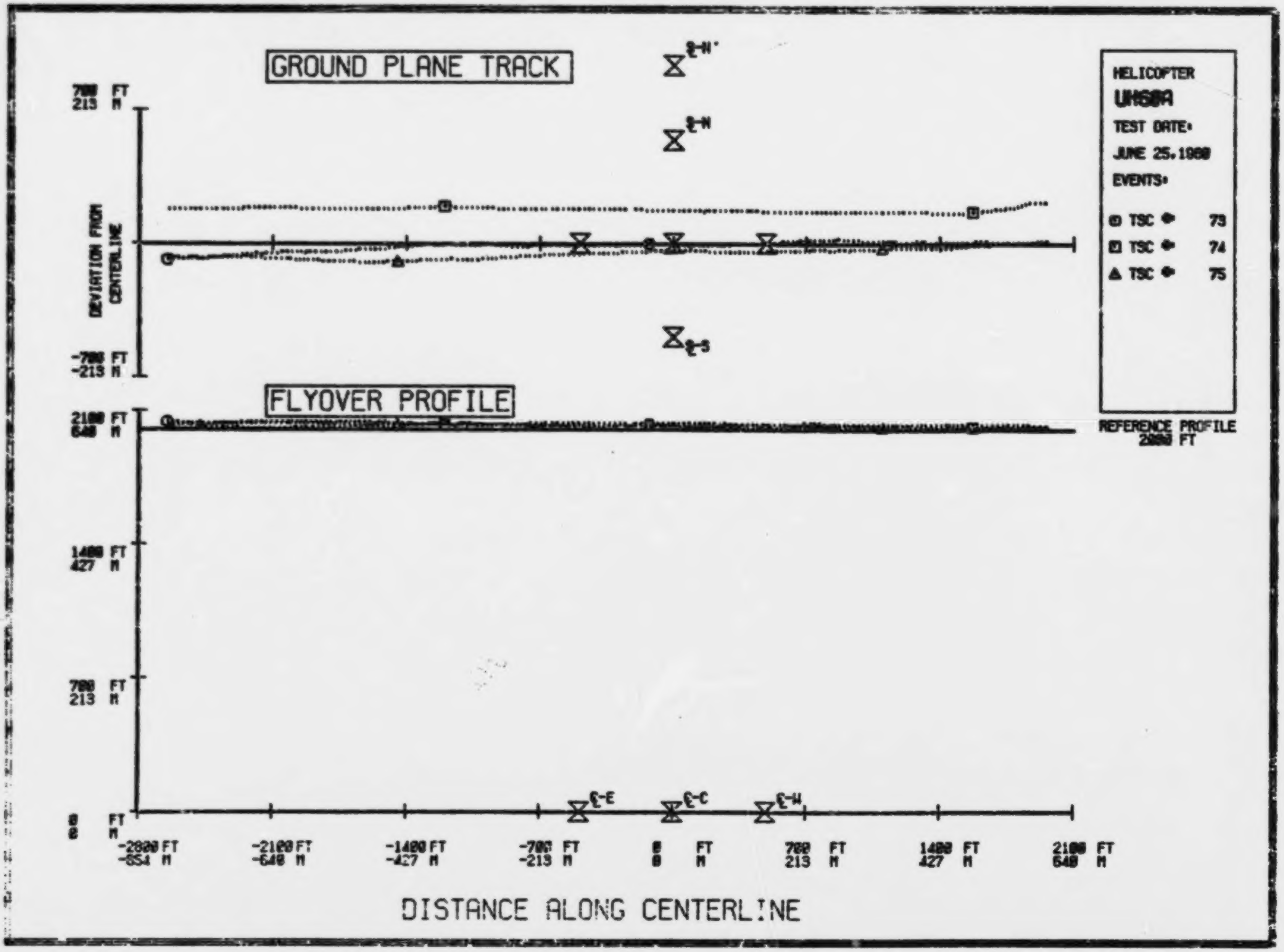

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
1500 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 25,1980
EVENTS:
TSC # 68
TSC # 69
TSC # 70
TSC # 71

FIGURE C5-5



BEST DOCUMENT AVAILABLE

FIGURE C5-6

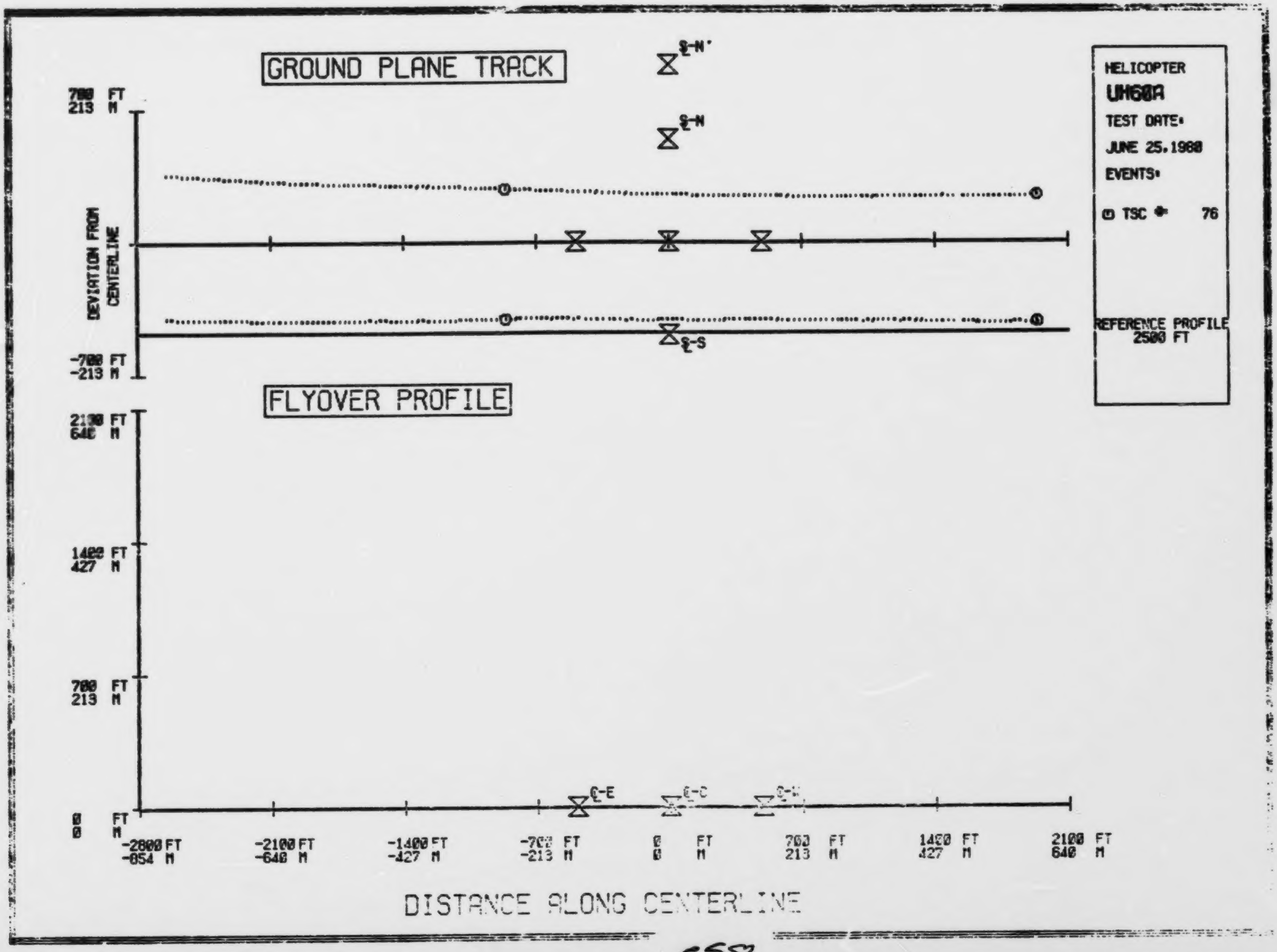


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TABLE C5-1

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
UH60A
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
56 F-E	8:21:20.5	8:21:20.1	45.8	0.2	168.1	322.5	502.3	140.1
57 F-W	8:24:11.0	8:24:10.6	78.2	0.3	141.6	323.7	457.8	135.0
58 F-E	8:26:11.5	8:26:10.8	-87.8	-0.3	164.0	337.6	833.3	156.1
59 F-W	8:28:47.5	8:28:47.0	182.7	0.7	143.4	327.6	567.7	144.8
60 F-E	8:31:28.5	8:31:27.5	369.0	1.3	166.8	727.3	1139.5	140.3
62 F-E	8:38:54.0	8:38:53.3	293.7	1.0	170.2	739.0	749.0	99.4
63 F-W	8:41:52.5	8:41:51.3	224.3	0.9	139.6	697.3	1343.7	148.7
64 F-E	8:46:16.5	8:46:14.9	-18.5	-0.1	168.8	984.9	1798.5	146.8
66 F-E	8:52: 3.5	8:52: 2.5	-198.5	-0.7	165.1	998.1	1100.1	114.9
67 F-W	8:55:10.5	8:55: 9.3	-41.0	-0.2	138.8	990.5	1300.5	130.4
68 F-E	8:58: 6.0	8:58: 2.7	325.2	1.1	166.1	1502.4	3737.0	156.3
69 F-W	9: 1:55.5	9: 1:51.9	403.0	1.6	146.2	1605.3	4110.2	157.0
70 F-E	9: 4:56.5	9: 4:54.0	94.7	0.3	162.9	1517.5	2789.2	147.0
71 F-W	9: 8:46.5	9: 8:42.9	163.2	0.6	151.4	1568.4	4085.5	157.4
73 F-W	9:18:41.0	9:18:37.5	152.2	0.6	153.2	2024.0	3945.5	149.1
74 F-E	9:21:33.0	9:21:34.8	101.0	0.4	154.9	2038.0	3639.0	145.9
75 F-W	9:25:19.5	9:25:17.7	-128.7	-0.5	151.1	2014.6	2017.9	93.3
76 F-E	9:28:19.5	9:28:16.9	95.7	0.3	165.3	2572.8	2908.1	117.8

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C5-2

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
UH60A
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
56 F-E	8:21:18.0	8:21:17.3	92.7	0.3	168.0	323.4	735.5	153.9
57 F-W	8:24:13.5	8:24:13.2	-81.5	-0.3	141.7	319.1	379.2	122.7
58 F-E	8:26:11.5	8:26:11.2	-87.8	-0.3	164.0	333.5	367.3	114.8
59 F-W	8:28:50.0	8:28:49.6	117.2	0.5	141.9	328.5	472.5	136.0
60 F-E	8:31:23.0	8:31:20.9	-234.0	-0.8	170.1	712.4	2402.8	162.8
62 F-E	8:38:52.0	8:38:51.3	240.0	0.8	170.4	729.2	760.7	106.6
63 F-W	8:41:56.0	8:41:55.1	393.0	1.6	138.0	709.4	1031.3	136.5
64 F-E	8:46:13.5	8:46:11.5	-158.5	-0.5	169.3	979.7	2211.2	153.7
66 F-E	8:51:58.5	8:51:56.9	295.5	1.0	166.5	1005.6	1832.7	146.7
67 F-W	8:55:13.0	8:55:11.9	-96.0	-0.4	142.4	988.0	1230.7	126.6
68 F-E	8:58: 4.5	8:58: 1.3	387.5	1.3	166.1	1509.1	3654.6	155.6
69 F-W	9: 2: 6.5	9: 2: 4.8	44.2	0.2	143.5	1492.5	1863.3	126.8
70 F-E	9: 4:52.5	9: 4:49.4	336.5	1.1	166.4	1519.7	3487.9	154.2
71 F-W	9: 8:55.0	9: 8:53.0	-221.3	-0.8	148.3	1474.2	2313.0	140.4
73 F-W	9:18:46.5	9:18:43.8	-254.8	-1.0	147.4	2023.3	3044.0	138.3
74 F-E	9:21:44.0	9:21:42.1	163.8	0.6	162.2	2030.7	2104.0	105.2
75 F-W	9:25:14.0	9:25:11.3	-121.2	-0.5	152.1	2003.2	2998.9	138.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C5-3

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
UH60A MAR 12,1981
MIC # 3 CENTERLINE EAST, 4 FT

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
56 F-E	8:21:21.5	8:21:20.9	44.7	0.1	169.0	324.7	725.3	153.4
57 F-W	8:24: 9.5	8:24: 9.2	196.8	0.8	141.0	319.6	360.3	117.5
58 F-E	8:26:13.0	8:26:12.2	111.2	0.4	163.5	343.7	925.5	158.2
59 F-W	8:28:45.5	8:28:45.0	226.8	0.9	143.0	316.1	556.0	145.3
60 F-E	8:31:27.5	8:31:25.7	284.2	1.0	167.7	742.8	2012.3	158.3
62 F-E	8:38:55.5	8:38:54.8	337.5	1.1	167.6	748.2	772.3	104.3
63 F-W	8:41:47.5	8:41:45.6	-96.2	-0.4	139.5	682.6	2123.7	161.3
64 F-E	8:46:17.5	8:46:15.7	54.7	0.2	163.5	992.1	2022.3	150.6
66 F-E	8:52: 6.0	8:52: 5.1	-54.5	-0.2	165.4	995.0	1018.8	102.4
67 F-W	8:55: 6.0	8:55: 4.4	313.2	1.3	138.8	994.1	1787.4	146.2
68 F-E	8:58:16.5	8:58:15.1	-143.5	-0.5	168.3	1437.9	1566.9	107.1
69 F-W	9: 1:57.0	9: 1:54.3	418.0	1.6	144.9	1495.4	3080.4	151.9
70 F-E	9: 4:57.0	9: 4:54.2	84.5	0.3	162.5	1519.5	3175.1	151.4
71 F-W	9: 8:48.0	9: 8:45.3	323.7	1.2	150.4	1483.5	3077.9	151.2
73 F-W	9:18:46.0	9:18:43.9	-249.0	-1.0	147.9	2015.8	2393.5	122.6
74 F-E	9:21:39.0	9:21:35.6	41.2	0.2	153.3	2039.0	3829.7	148.2
75 F-W	9:25: 3.5	9:24:59.3	-11.3	-0.0	151.5	2180.3	4793.7	152.9
76 F-E	9:28:13.0	9:28: 8.7	2.8	0.0	161.2	2592.5	4868.7	147.8

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C5-4

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
UH60A MAR 12,1981
MIC # 4 SIDELINE NORTH, 4 FT

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
56 F-E	8:21:21.0	8:21:20.4	47.8	0.2	168.7	569.1	633.4	116.0
57 F-W	8:24:11.5	8:24:11.0	31.0	0.1	141.7	553.3	599.9	112.7
58 F-E	8:26:12.0	8:26:11.3	-43.3	-0.1	164.2	536.0	814.1	138.8
59 F-W	8:28:49.0	8:28:48.5	173.5	0.7	142.1	601.4	612.0	100.7
60 F-E	8:31:23.5	8:31:21.0	-158.8	-0.5	169.9	759.2	2856.6	164.6
62 F-E	8:38:54.0	8:38:53.3	293.7	1.0	170.8	793.7	807.9	100.8
63 F-W	8:41:54.5	8:41:53.6	377.7	1.6	137.7	862.2	1059.6	125.5
64 F-E	8:46:17.0	8:46:15.5	19.2	0.1	168.6	1072.5	1707.0	141.1
66 F-E	8:52: 4.5	8:52: 3.5	-123.3	-0.4	165.3	1070.8	1089.7	100.7
67 F-W	8:55:14.5	8:55:13.5	-98.8	-0.4	140.8	1110.4	1118.1	83.3
68 F-E	8:58:15.0	8:58:13.6	-223.3	-0.8	167.1	1527.7	1581.9	105.0
69 F-W	9: 1:56.0	9: 1:52.5	396.3	1.5	146.4	1634.5	3973.8	155.7
70 F-E	9: 5: 4.0	9: 5: 2.6	50.5	0.2	167.0	1569.8	1570.0	89.1
71 F-W	9: 8:53.5	9: 8:51.5	-74.0	-0.3	148.5	1576.0	2287.1	136.4
73 F-W	9:18:47.0	9:18:44.7	-229.2	-0.9	147.8	2032.8	2605.5	126.9
74 F-E	9:21:38.5	9:21:35.4	59.3	0.2	153.6	2055.5	3503.8	144.1
75 F-W	9:25:17.5	9:25:15.6	-123.7	-0.5	151.6	2082.0	2187.3	107.9
76 F-E	9:28:24.0	9:28:21.7	-9.5	-0.0	166.6	2572.4	2572.3	90.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C5-5

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
UH60A
MIC # 5 SIDELINE SOUTH, 4 FT

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
56 F-E	8:21:21.5	8:21:20.9	44.7	0.1	169.0	640.7	655.6	102.2
57 F-W	8:24:12.0	8:24:11.4	-1.8	-0.0	141.6	622.6	634.4	101.1
58 F-E	8:26:13.5	8:26:12.9	149.7	0.5	163.7	651.7	670.2	103.5
59 F-W	8:28:47.0	8:28:46.2	259.3	1.0	142.9	580.6	874.3	138.4
60 F-E	8:31:29.0	8:31:27.9	430.3	1.5	167.1	982.6	1241.0	127.6
62 F-E	8:38:54.0	8:38:53.1	293.7	1.0	170.2	972.6	987.8	100.0
63 F-W	8:41:56.5	8:41:55.8	360.7	1.5	137.7	844.1	848.2	95.6
66 F-E	8:52: 5.0	8:52: 4.0	-105.5	-0.4	165.4	1152.8	1153.3	91.7
67 F-W	8:55:14.5	8:55:13.5	-98.8	-0.4	140.8	1101.7	1107.9	83.9
68 F-E	8:58:14.0	8:58:12.4	-312.3	-1.1	165.7	1632.2	1789.7	114.2
69 F-W	9: 2: 7.5	9: 2: 6.1	-41.5	-0.2	144.5	1579.7	1610.9	101.3
70 F-E	9: 5: 1.5	9: 4:59.9	-48.5	-0.2	167.0	1619.6	1772.7	114.0
71 F-W	9: 8:58.5	9: 8:57.1	-145.3	-0.6	149.1	1535.6	1553.4	98.7
73 F-W	9:18:42.5	9:18:39.3	5.7	0.0	149.3	2079.0	3579.0	144.5
74 F-E	9:21:38.0	9:21:34.7	101.0	0.4	154.9	2136.9	3717.9	144.9
75 F-W	9:25:19.0	9:25:17.2	-95.2	-0.4	149.9	2065.4	2077.3	96.1
76 F-E	9:28:18.5	9:28:15.7	173.3	0.6	166.3	2665.7	3153.5	122.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C5-6

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
UH60A
MIC # 6 SIDELINE NORTH, 4 FT

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
56 F-E	8:21:20.0	8:21:19.0	58.2	0.2	168.1	921.3	1148.6	126.7
57 F-W	8:24: 9.0	8:24: 7.8	202.2	0.8	140.6	945.7	1366.2	136.2
58 F-E	8:26:12.0	8:26:11.0	-43.3	-0.1	164.2	922.4	1156.4	127.1
59 F-W	8:28:46.0	8:28:44.8	239.7	0.9	143.6	998.7	1413.2	135.0
60 F-E	8:31:28.0	8:31:26.7	327.5	1.1	167.0	1013.6	1503.5	137.6
62 F-E	8:38:52.0	8:38:50.8	240.0	0.8	170.4	1055.0	1371.1	129.7
63 F-W	8:41:54.0	8:41:52.7	335.0	1.4	139.0	1175.4	1426.4	124.5
64 F-E	8:46:17.0	8:46:15.3	19.2	0.1	163.6	1311.4	1896.1	136.2
66 F-E	8:52: 1.0	8:51:59.3	62.7	0.2	166.0	1299.7	1872.2	136.0
67 F-W	8:55:14.5	8:55:13.3	-98.8	-0.4	140.8	1366.1	1369.4	86.0
68 F-E	8:58:11.0	8:58: 8.9	-140.2	-0.5	165.0	1676.5	2395.3	135.6
69 F-W	9: 2: 9.0	9: 2: 7.5	-126.2	-0.5	146.0	1749.4	1749.4	90.0
70 F-E	9: 4:53.0	9: 4:49.5	356.3	1.2	166.0	1736.5	4004.6	154.3
71 F-W	9: 8:58.5	9: 8:56.9	-145.3	-0.6	149.1	1778.5	1809.7	100.7
73 F-W	9:18:53.0	9:18:51.0	46.3	0.2	143.6	2228.8	2229.5	88.5
74 F-E	9:21:38.5	9:21:35.3	59.3	0.2	153.6	2167.4	3578.3	142.7
75 F-W	9:25:11.5	9:25: 8.6	-123.3	-0.5	152.4	2233.8	3320.0	137.7
76 F-E	9:28:23.5	9:28:21.2	24.7	0.1	165.1	2649.9	2656.3	94.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C5-7

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980 FAA/AEE 120
UH60A MAR 12,1981
MIC #1G CENTERLINE CENTER, GROUND

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
56 F-E	8:21:21.0	8:21:20.7	47.8	0.2	168.7	326.4	391.2	123.5
57 F-W	8:24:11.0	8:24:10.6	78.2	0.3	141.6	337.7	462.2	134.9
58 F-E	8:26:12.0	8:26:11.4	-43.3	-0.1	164.2	341.5	670.6	149.4
59 F-W	8:28:47.5	8:28:47.0	182.7	0.7	143.4	331.6	570.0	144.4
60 F-E	8:31:31.0	8:31:30.3	451.8	1.5	165.6	721.1	734.0	95.1
62 F-E	8:38:54.0	8:38:53.3	293.7	1.0	170.2	742.9	752.9	99.3
63 F-W	8:41:52.5	8:41:51.3	224.3	0.9	139.6	701.3	1345.7	148.6
64 F-E	8:46:17.5	8:46:16.2	54.7	0.2	162.5	922.9	1513.0	139.2
66 F-E	8:52: 3.0	8:52: 2.0	-223.3	-0.8	165.3	1002.0	1179.0	121.8
67 F-W	8:55:10.0	8:55: 8.8	4.9	0.0	132.6	994.5	1391.8	134.4
68 F-E	8:58:13.0	8:58:11.4	-276.5	-0.9	161.8	1506.4	1817.4	124.0
69 F-W	9: 1:55.5	9: 1:51.9	403.0	1.6	146.2	1609.0	4111.7	157.0
70 F-E	9: 5: 0.5	9: 4:58.9	6.7	0.0	165.5	1521.4	1827.5	123.6
71 F-W	9: 8:50.0	9: 8:47.3	280.2	1.1	149.4	1480.2	3074.0	151.2
73 F-W	9:18:46.5	9:18:44.2	-254.8	-1.0	147.4	2026.0	2642.6	129.9
74 F-E	9:21:38.0	9:21:34.8	101.0	0.4	154.9	2042.0	3641.2	145.9
75 F-W	9:25:13.5	9:25:11.1	-108.3	-0.4	156.8	2018.6	2704.4	131.7
76 F-E	9:28:23.5	9:28:21.2	24.7	0.1	165.1	2576.8	2580.3	93.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C5-8

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
UH60A
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
MAR 12,1981

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
56	F-E	8:21:20.0	8:21:19.4	58.2	0.2	168.1	294.1	633.2	152.3
57	F-W	8:24:11.0	8:24:10.6	78.2	0.3	141.6	295.0	434.4	137.2
58	F-E	8:26:12.0	8:26:11.4	-43.3	-0.1	164.2	309.2	650.1	151.6
59	F-W	8:28:47.5	8:28:47.0	182.7	0.7	143.4	293.7	547.8	147.0
60	F-E	8:31:29.0	8:31:28.1	430.3	1.5	167.1	699.4	985.3	134.8
62	F-E	8:38:54.0	8:38:53.4	293.7	1.0	170.2	710.7	719.8	99.1
63	F-W	8:41:52.5	8:41:51.3	224.3	0.9	139.6	668.4	1325.3	149.7
64	F-E	8:46:19.0	8:46:16.8	87.5	0.3	167.8	956.0	1356.0	135.2
66	F-E	8:52: 3.5	8:52: 2.6	-198.5	-0.7	165.1	969.2	1071.4	115.2
67	F-W	8:55:10.5	8:55: 9.4	-41.0	-0.2	138.8	961.6	1275.4	131.1
68	F-E	8:58:11.5	8:58: 9.6	-164.7	-0.6	165.2	1473.6	2102.9	135.5
69	F-W	9: 1:59.5	9: 1:56.9	282.5	1.1	144.9	1465.2	2945.2	150.2
70	F-E	9: 4:56.0	9: 4:53.4	202.7	0.7	163.1	1488.5	2920.2	149.4
71	F-W	9: 8:54.5	9: 8:52.8	-143.3	-0.5	148.0	1447.2	1975.0	132.9
73	F-W	9:18:41.0	9:18:37.5	152.2	0.6	153.2	1995.0	3926.2	149.5
74	F-E	9:21:38.5	9:21:35.4	59.3	0.2	153.6	2003.1	3479.7	144.7
75	F-W	9:25:13.5	9:25:11.1	-108.8	-0.4	150.8	1985.6	2674.0	132.1
76	F-E	9:28:23.0	9:28:20.7	60.3	0.2	166.1	2544.0	2562.4	96.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C5-9

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 25,1980
UH60A
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
56 F-E	8:21:21.5	8:21:20.9	44.7	0.1	169.0	642.7	657.5	102.2
57 F-W	8:24:10.5	8:24: 9.8	122.5	0.5	141.5	624.7	814.0	129.9
58 F-E	8:26:13.5	8:26:12.9	149.7	0.5	163.7	653.7	672.2	103.5
59 F-W	8:28:47.5	8:28:46.8	182.7	0.7	143.4	582.8	775.9	131.3
60 F-E	8:31:29.0	8:31:27.9	430.3	1.5	167.1	985.5	1243.2	127.6
62 F-E	8:38:53.0	8:38:52.0	219.2	0.7	169.8	975.6	1091.8	116.7
63 F-W	8:41:56.0	8:41:55.2	393.0	1.6	138.0	847.4	874.5	104.3
64 F-E	8:46:17.0	8:46:15.4	19.2	0.1	168.6	1132.1	1771.2	140.3
66 F-E	8:52: 4.0	8:52: 2.9	-143.0	-0.5	165.1	1156.2	1208.4	106.9
67 F-W	8:55:14.0	8:55:13.0	-89.3	-0.4	140.2	1105.3	1105.3	90.1
68 F-E	8:58:13.5	8:58:11.8	-312.5	-1.1	165.1	1635.9	1864.3	118.7
69 F-W	9: 2: 7.5	9: 2: 6.1	-41.5	-0.2	144.5	1523.4	1614.7	101.3
70 F-E	9: 5: 1.0	9: 4:59.4	-59.2	-0.2	166.4	1623.4	1842.3	118.2
71 F-W	9: 8:58.5	9: 8:57.1	-145.3	-0.6	149.1	1539.4	1557.2	98.7
73 F-W	9:18:51.5	9:18:49.6	128.2	0.5	145.2	2082.8	2102.3	97.2
74 F-E	9:21:38.0	9:21:34.7	101.0	0.4	154.9	2140.7	3720.0	144.9
75 F-W	9:25:21.0	9:25:19.2	-1.8	-0.0	148.3	2069.3	2084.0	83.2
76 F-E	9:28:22.0	9:28:19.6	116.5	0.4	167.5	2669.6	2740.6	103.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

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Sub-Appendix C6 Summary
Bell 206-L June 26, 1981
Flight Path Tracking Plots and Position Data

1. **FLIGHT PATH TRACKING PLOTS**

Event No.	Plot Fig No.	Operation			
1	C6-1	300 Ft.	LFO	115 kts	Target Speed
2	"	"		"	"
3	"	"		"	"
4	"	"		"	"
5	C6-2	700 Ft.	LFO	115 kts	Target Speed
6	"	"		"	"
7	"	"		"	"
8	"	"		"	"
9	C6-3	1000 Ft.	LFO	115 kts	Target Speed
10	"	"		"	"
11	"	"		"	"
12	"	"		"	"
13	C6-4	1500 Ft.	LFO	115 kts	Target Speed
14	"	"		"	"
15	"	"		"	"
16	"	"		"	"
18	C6-5	2000 Ft.	LFO	115 kts	Target Speed
19	"	"		"	"

2. **POSITION DATA TABLES**

Table No.	Microphone
C6-1	Mic. 1, Centerline Center 4 ft.
C6-2	Mic. 2, Centerline 150m West 4 ft.
C6-3	Mic. 3, Centerline 150m East 4 ft.
C6-4	Mic. 4, Sideline 164m North 4 ft.
C6-5	Mic. 5, Sideline 150m South 4 ft.
C6-6	Mic. 6, Sideline 284m North 4 ft.
C6-7	Mic. 1G, Centerline Center (Ground)
C6-8	Mic. 1H, Centerline Center 33 ft.
C6-9	Mic. 5G, Sideline 150m South (Ground)

FIGURE C6-1

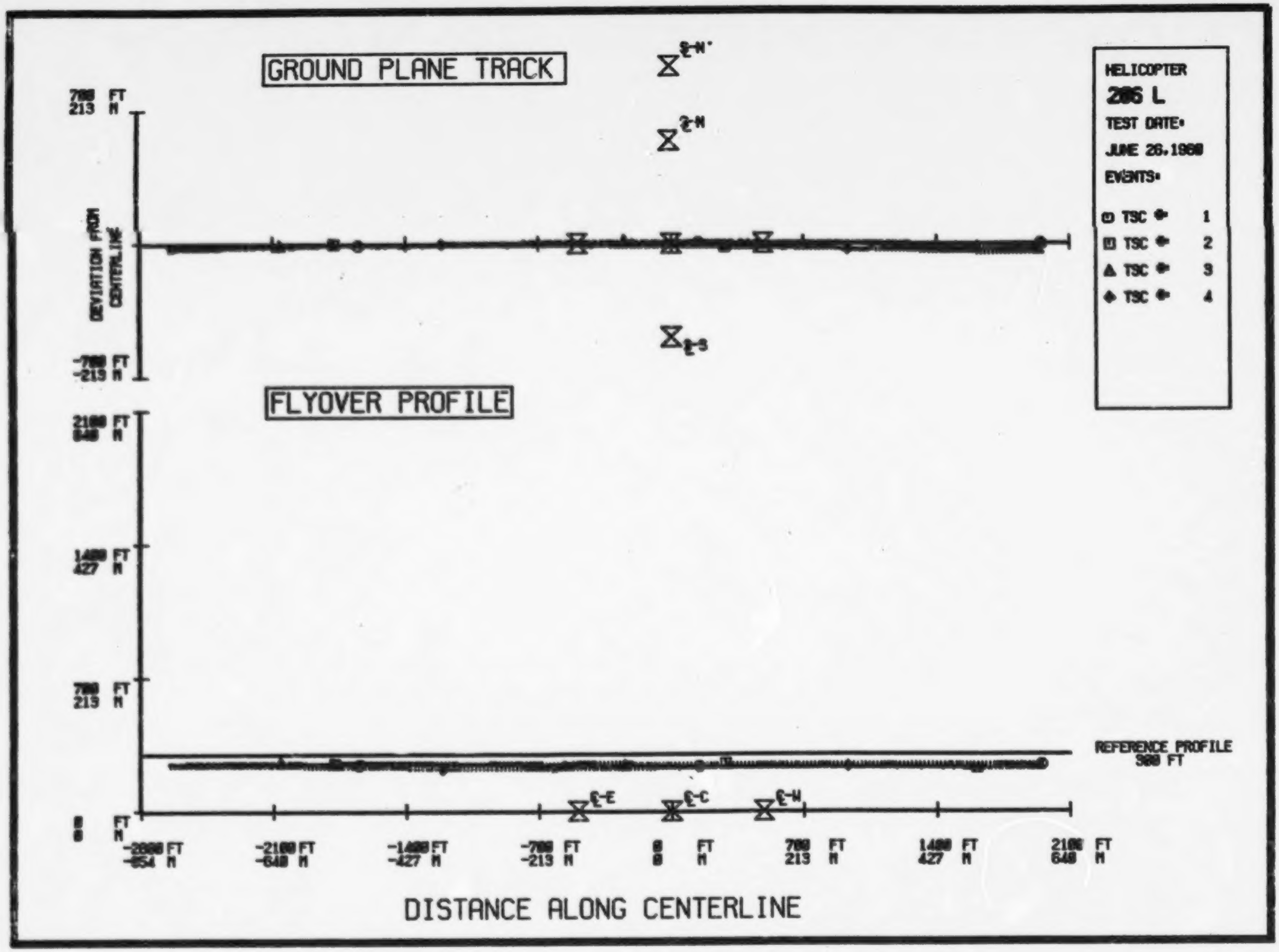
GROUND PLANE TRACK
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
℄-N'
℄-N
℄-S
FLYOVER PROFILE
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
REFERENCE PROFILE 300 FT
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
206 L
TEST DATE:
JUNE 26,1980
EVENTS:
○ TSC #: 1
⊡ TSC #: 2
▲ TSC #: 3
◆ TSC #: 4

FIGURE C6-2

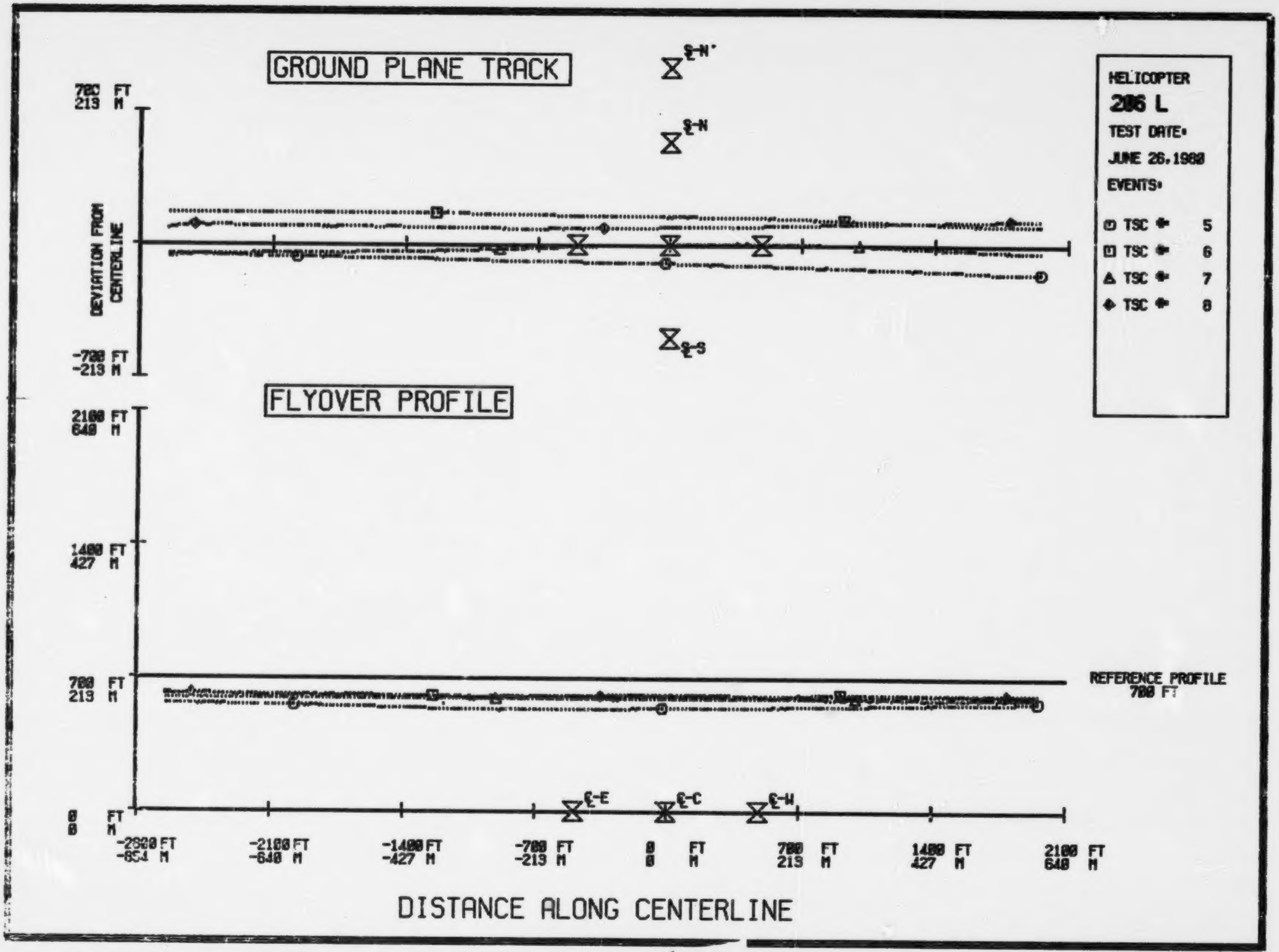
GROUND PLANE TRACK
FLYOVER PROFILE
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE
700 FT
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
206 L
TEST DATE:
JUNE 26, 1980
EVENTS:
TSC # 5
TSC # 6
TSC # 7
TSC # 8

FIGURE C6-3

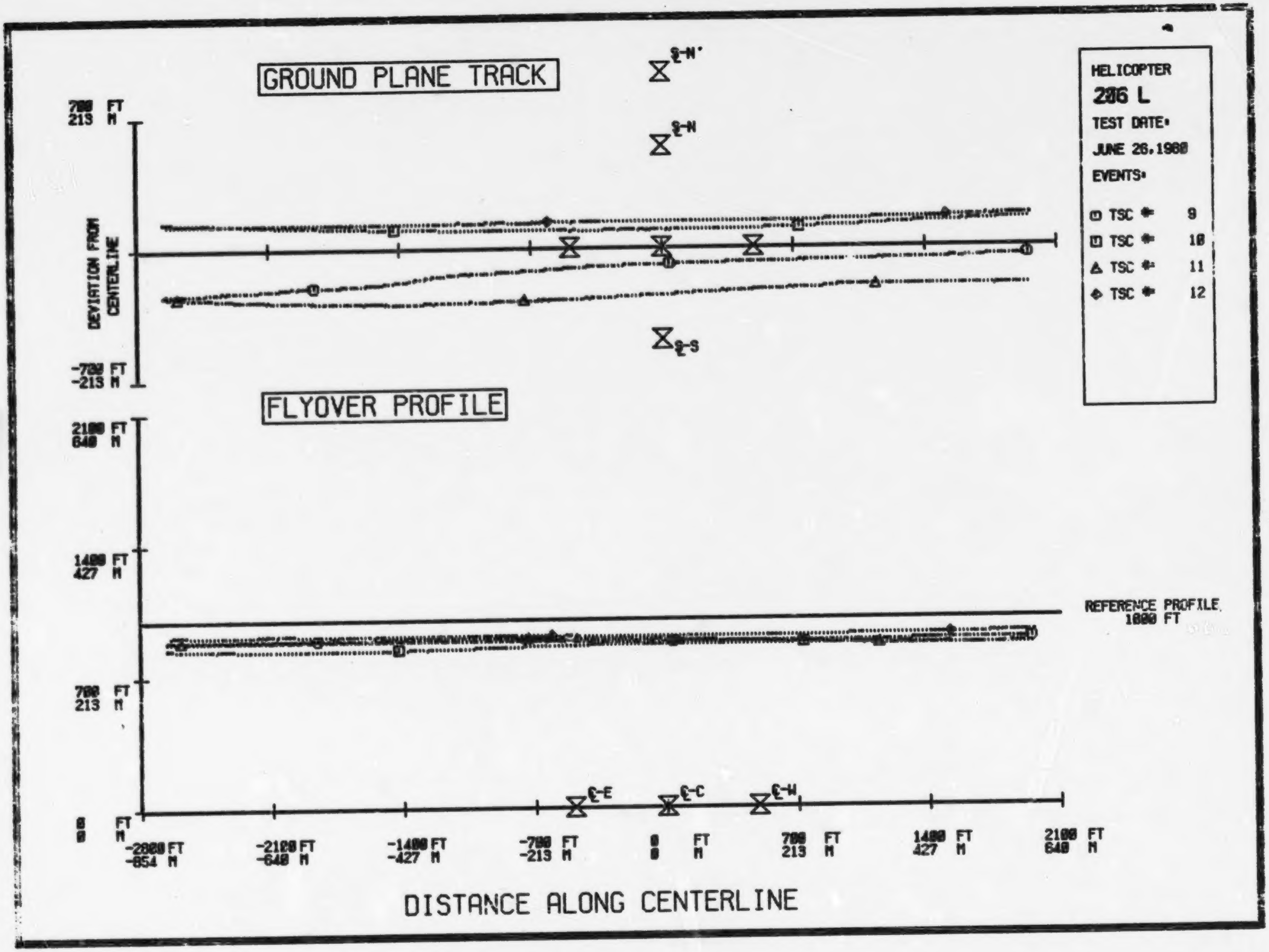
GROUND PLANE TRACK
700 FT
213 M
-700 FT
-213 M
DEVIATION FROM CENTERLINE
℄-N'
℄-N
℄-S
HELICOPTER
206 L
TEST DATE:
JUNE 26, 1980
EVENTS:
TSC # 9
TSC # 10
TSC # 11
TSC # 12
FLYOVER PROFILE
2100 FT
640 M
1400 FT
427 M
700 FT
213 M
0 FT
0 M
REFERENCE PROFILE
1000 FT
℄-E
℄-C
℄-W
-2800 FT
-854 M
-2100 FT
-640 M
-1400 FT
-427 M
-700 FT
-213 M
0 FT
0 M
700 FT
213 M
1400 FT
427 M
2100 FT
640 M
DISTANCE ALONG CENTERLINE

FIGURE C6-4

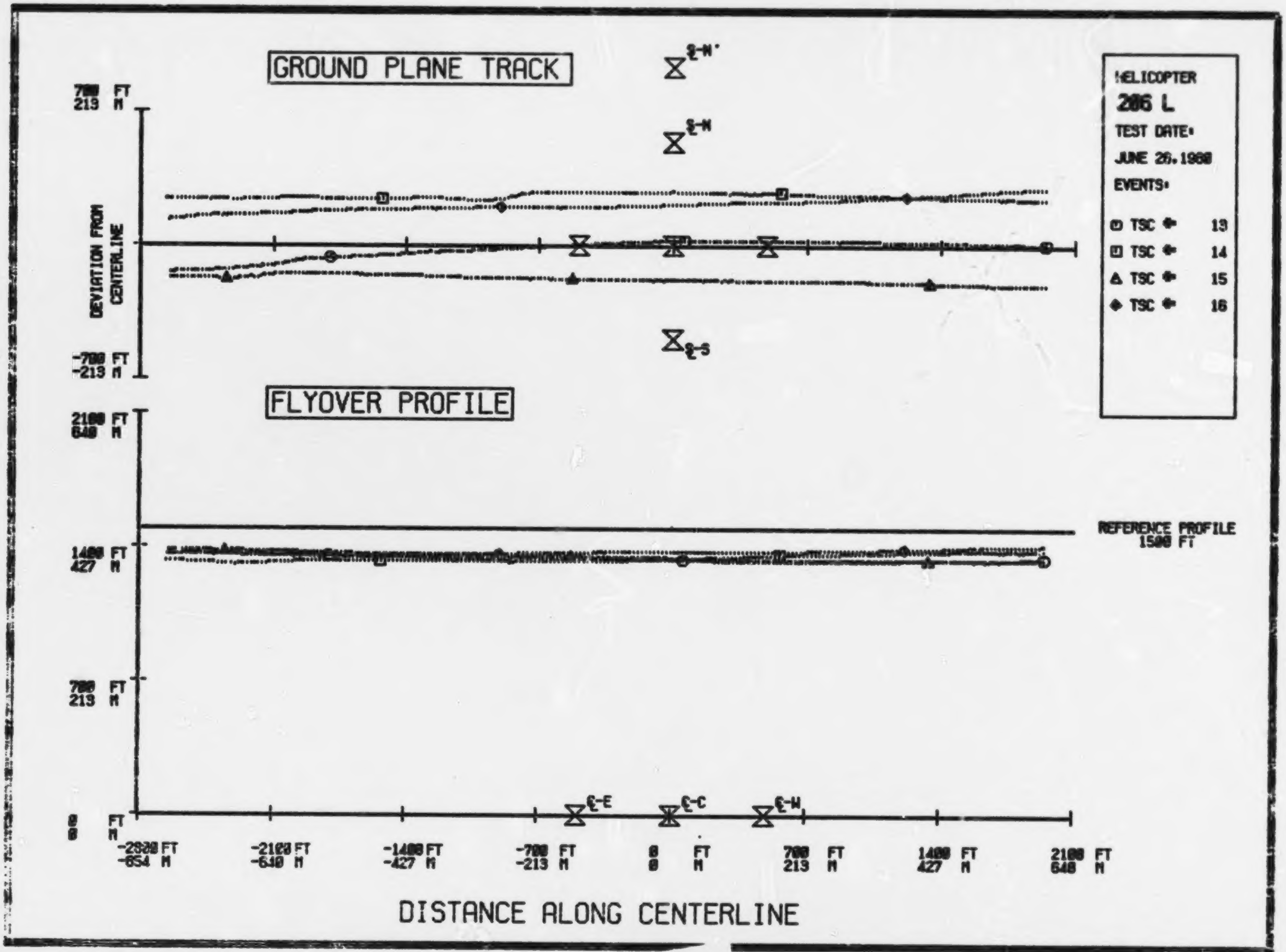

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FIGURE C6-5

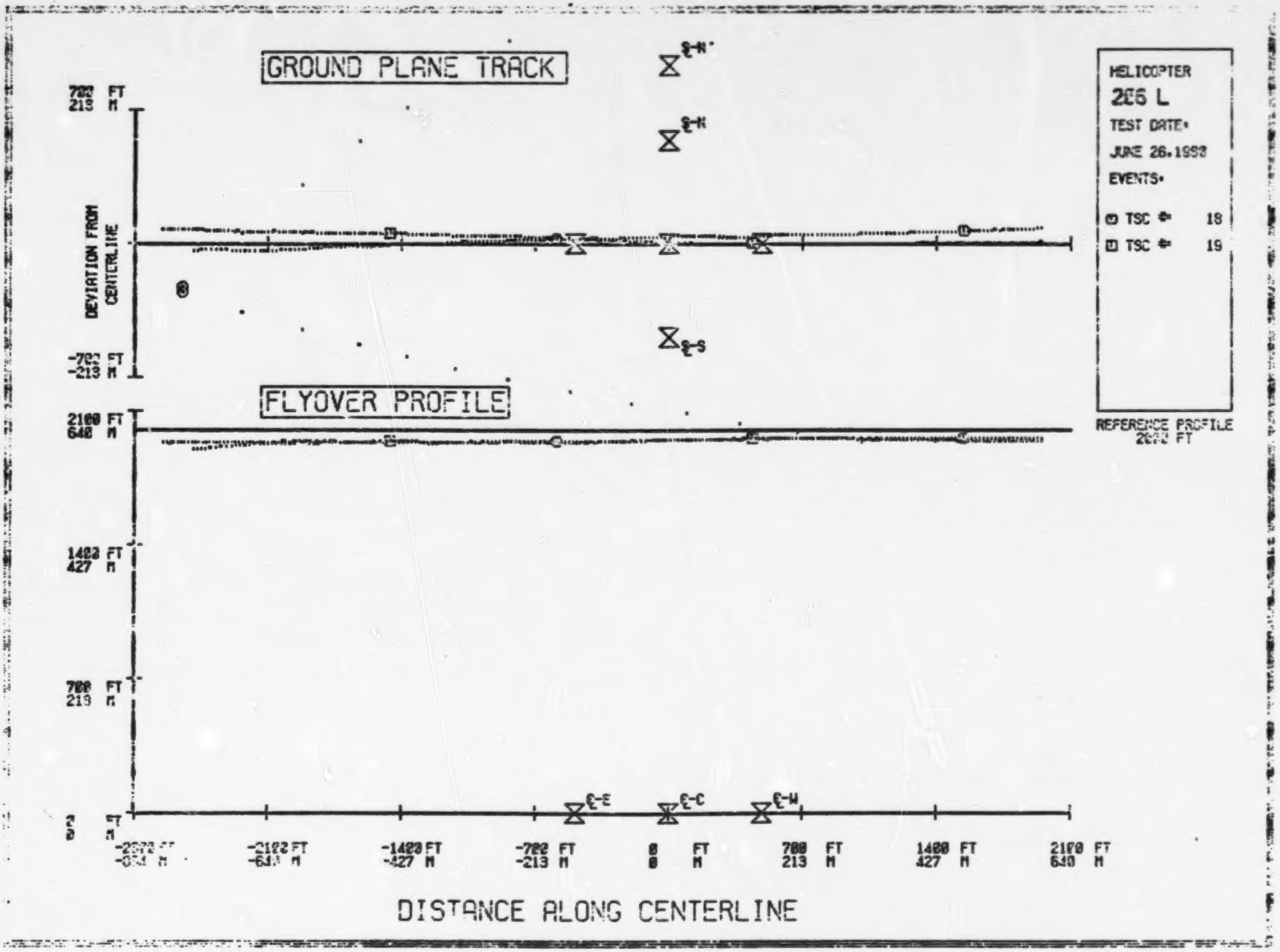

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TABLE C6-1

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980 — FAA/AEE 120
206L — MAR 12,1981
MIC # 1 CENTERLINE CENTER, 4 FT

****

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1	F-E	5:41:48.5	5:41:48.3	30.3	0.2	106.5	231.6	257.6	116.0
2	F-W	5:44: 7.0	5:44: 6.8	-97.2	-0.5	121.9	248.6	266.2	110.9
3	F-E	5:46:57.0	5:46:56.7	154.3	0.8	108.7	232.4	338.1	136.6
4	F-W	5:49:18.5	5:49:18.2	132.7	0.6	127.1	222.8	342.0	139.3
5	F-E	5:52:30.5	5:52:29.9	-108.5	-0.5	117.4	546.8	678.7	126.3
6	F-W	5:55:25.5	5:55:24.8	115.2	0.5	127.5	625.9	777.8	126.4
7	F-E	5:58:48.0	5:58:47.5	-38.0	-0.2	113.3	588.9	614.2	106.5
8	F-W	6: 1:34.0	6: 1:33.1	38.3	0.2	128.5	608.5	996.7	142.4
9	F-E	6: 7:14.5	6: 7:13.7	29.5	0.1	112.8	882.5	909.4	104.0
10	F-W	6:10: 9.5	6:10: 8.1	303.2	1.3	128.8	868.7	1581.7	146.7
11	F-E	6:14: 2.0	6:14: 1.1	275.7	1.4	111.2	921.1	991.3	111.7
12	F-W	6:18:11.0	6:18:10.2	-38.3	-0.2	125.7	914.5	920.1	96.3
13	F-E	6:22:23.5	6:22:22.2	113.5	0.6	111.6	1331.3	1456.2	113.9
14	F-W	6:26:23.0	6:26:21.6	111.8	0.5	122.5	1366.8	1604.5	121.6
15	F-E	6:32:14.0	6:32:12.7	174.2	0.9	110.6	1353.4	1490.3	114.7
16	F-W	6:36:13.0	6:36:11.6	163.7	0.7	126.8	1368.6	1572.8	112.0
18	F-W	6:45:20.0	6:45:18.3	115.2	0.5	127.0	1946.8	1947.2	89.6
19	F-E	6:49:31.0	6:49:28.9	71.5	0.4	111.3	1945.5	2328.7	123.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

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TABLE C.6-2

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
206L
MIC # 2 CENTERLINE WEST, 4 FT

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5:41:46.0	5:41:45.8	3.5	0.0	106.7	230.3	240.5	106.7
2 F-W	5:44: 9.0	5:44: 8.7	0.3	0.0	121.6	247.2	308.3	126.8
3 F-E	5:46:55.0	5:46:54.8	41.7	0.2	108.9	225.9	251.0	115.9
4 F-W	5:49:21.5	5:49:21.3	90.0	0.4	126.5	227.9	246.7	112.5
5 F-E	5:52:29.0	5:52:28.5	-148.0	-0.7	116.8	553.3	586.6	109.4
6 F-W	5:55:29.5	5:55:29.0	8.2	0.0	128.4	622.7	625.8	95.7
7 F-E	5:58:45.0	5:58:44.4	50.5	0.3	112.5	590.0	640.3	112.9
8 F-W	6: 1:37.0	6: 1:36.2	-9.8	-0.0	127.6	608.0	868.2	135.6
9 F-E	6: 7:11.0	6: 7:10.1	-5.0	-0.0	113.1	881.2	970.7	114.8
10 F-W	6:10:16.0	6:10:15.2	43.2	0.2	126.8	869.2	917.8	108.7
11 F-E	6:13:59.0	6:13:58.1	273.5	1.4	111.6	902.9	1004.0	115.9
12 F-W	6:18:11.5	6:18:10.6	-32.7	-0.1	126.2	915.0	1048.2	119.2
13 F-E	6:22:20.0	6:22:18.6	-79.7	-0.4	112.0	1326.6	1545.2	120.8
14 F-W	6:26:25.5	6:26:24.1	351.2	1.6	123.4	1381.3	1598.2	120.2
15 F-E	6:32:11.0	6:32: 9.7	12.2	0.1	111.4	1343.1	1526.1	118.3
16 F-W	6:36:12.0	6:36:10.2	282.0	1.3	126.4	1392.7	2066.0	137.6
18 F-W	6:45:20.0	6:45:18.2	115.2	0.5	127.0	1951.0	2012.3	104.2
19 F-E	6:49:29.0	6:49:27.0	179.5	0.9	111.5	1952.3	2257.2	120.1

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

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TABLE C6-3

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
206L
MIC # 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5:41:52.5	5:41:52.3	104.7	0.6	105.8	232.9	259.9	63.6
2 F-W	5:44: 5.5	5:44: 5.3	-70.7	-0.3	122.1	251.6	268.2	69.8
3 F-E	5:47: 1.5	5:47: 1.3	141.5	0.7	107.9	241.9	260.6	68.2
4 F-W	5:49:17.5	5:49:17.3	83.0	0.4	127.0	216.7	220.7	79.1
5 F-E	5:52:36.0	5:52:35.5	30.5	0.1	117.0	540.9	580.5	68.7
6 F-W	5:55:26.0	5:55:25.4	74.0	0.3	128.0	624.5	648.0	74.5
7 F-E	5:58:52.5	5:58:52.0	23.5	0.1	113.1	587.3	620.1	71.3
8 F-W	6: 1:34.0	6: 1:33.4	38.3	0.2	128.5	606.5	649.8	111.0
9 F-E	6: 7:18.0	6: 7:17.2	61.3	0.3	112.1	886.5	887.0	91.9
11 F-E	6:14: 8.0	6:14: 7.2	32.5	0.2	109.9	934.8	966.8	75.2
12 F-W	6:18:10.0	6:18: 9.2	-45.8	-0.2	126.0	918.3	934.0	79.5
13 F-E	6:22:29.0	6:22:27.8	84.7	0.4	110.7	1338.8	1338.9	90.7
14 F-W	6:26:25.0	6:26:23.8	277.0	1.3	124.6	1355.0	1356.8	87.1
15 F-E	6:32:23.0	6:32:21.7	78.8	0.4	108.0	1361.2	1466.2	68.2
16 F-W	6:36: 2.5	6:35:59.7	-238.0	-1.1	128.1	1383.4	3138.9	153.8
18 F-W	6:45:18.5	6:45:16.8	137.3	0.6	126.3	1940.2	1949.8	84.3
19 F-E	6:49:41.6	6:49:39.3	56.5	0.3	112.7	1935.9	1943.5	84.9

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C6-4

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
206L
MIC # 4 SIDELINE NORTH, 4 FT

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5:41:48.5	5:41:48.0	30.3	0.2	106.5	586.6	608.8	105.5
2 F-W	5:44: 7.5	5:44: 7.0	-97.3	-0.5	121.6	565.1	566.5	94.1
3 F-E	5:46:58.5	5:46:58.0	205.7	1.1	108.2	532.2	532.2	90.5
4 F-W	5:49:18.0	5:49:17.4	106.8	0.5	127.2	551.7	699.4	127.9
5 F-E	5:52:30.5	5:32:29.7	-108.5	-0.5	117.4	795.8	918.0	119.9
6 F-W	5:55:25.0	5:55:24.2	133.3	0.6	127.7	697.3	911.1	130.1
7 F-E	5:58:48.0	5:58:47.3	-38.0	-0.2	113.3	766.0	789.3	104.0
8 F-W	6: 1:38.0	6: 1:37.4	-7.2	-0.0	127.3	721.0	729.7	81.1
9 F-E	6: 7:13.5	6: 7:12.5	32.8	0.2	112.7	1053.4	1142.2	112.7
10 F-W	6:10:15.0	6:10:14.2	49.5	0.2	127.0	950.4	951.0	91.9
11 F-E	6:14: 1.5	6:14: 0.4	290.8	1.5	111.3	1156.3	1251.3	112.5
12 F-W	6:18:11.5	6:18:10.6	-32.7	-0.1	126.2	970.6	970.8	91.2
13 F-E	6:22:22.5	6:22:21.1	81.0	0.4	112.3	1410.4	1626.9	119.9
14 F-W	6:26:25.5	6:26:24.3	351.2	1.6	123.4	1254.0	1379.6	101.1
15 F-E	6:32:12.5	6:32:10.9	105.8	0.5	110.7	1500.1	1782.7	122.7
16 F-W	6:36:16.5	6:36:15.3	73.0	0.3	125.2	1399.1	1399.1	89.6
18 F-W	6:45:18.5	6:45:16.7	137.3	0.6	126.3	1999.4	2024.5	99.0
19 F-E	6:49:31.0	6:49:28.9	71.5	0.4	111.3	2005.2	2383.5	122.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

BEST DOCUMENT AVAILABLE

TABLE C6-5

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980 FAA/AEE 120
206L MAR 12,1981
MIC # 5 SIDELINE SOUTH, 4 FT

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5:41:49.5	5:41:49.0	11.8	0.1	106.4	543.6	543.6	89.1
3 F-E	5:46:58.5	5:46:58.0	205.7	1.1	108.2	555.8	555.8	90.0
4 F-W	5:49:19.0	5:49:18.5	139.3	0.6	127.0	528.1	566.4	111.2
5 F-E	5:52:33.0	5:52:32.4	-103.0	-0.5	117.5	669.1	677.9	80.8
6 F-W	5:55:26.0	5:55:25.1	74.0	0.3	128.0	884.0	968.2	114.1
7 F-E	5:58:49.5	5:58:48.8	-30.0	-0.2	113.1	768.5	772.0	84.5
8 F-W	6: 1:36.0	6: 1:35.2	11.8	0.1	127.4	839.5	905.5	112.0
9 F-E	6: 7:16.0	6: 7:15.2	67.7	0.3	113.3	965.5	967.1	86.7
10 F-W	6:10:16.5	6:10:15.6	28.7	0.1	126.9	1044.0	1078.7	75.4
11 F-E	6:14: 3.5	6:14: 2.7	218.0	1.1	110.3	918.4	924.4	96.5
12 F-W	6:18: 9.5	6:18: 8.4	-56.2	-0.3	125.7	1102.2	1201.0	113.4
13 F-E	6:22:26.5	6:22:25.2	150.8	0.8	110.6	1427.9	1428.3	91.3
14 F-W	6:26:24.0	6:26:22.5	250.0	1.1	124.3	1545.0	1682.6	113.3
15 F-E	6:32:13.0	6:32:11.6	147.8	0.8	111.0	1377.5	1611.3	121.3
16 F-W	6:36:14.0	6:36:12.6	45.2	0.2	126.1	1543.5	1629.7	108.7
18 F-W	6:45:17.0	6:45:15.1	166.5	0.7	126.4	2016.6	2115.6	107.6
19 F-E	6:49:37.0	6:49:35.2	-197.7	-1.0	112.5	2008.2	2010.9	93.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C6-6

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
206L
MIC # 6 SIDELINE NORTH, 4 FT

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5:41:47.5	5:41:46.6	25.7	0.1	106.9	959.2	1038.5	112.5
2 F-W	5:44: 8.0	5:44: 7.1	-70.0	-0.3	121.9	978.6	978.6	90.2
3 F-E	5:46:56.5	5:46:55.6	134.2	0.7	109.0	946.8	1055.3	116.2
4 F-W	5:49:18.5	5:49:17.6	132.7	0.6	127.1	969.6	1041.9	111.5
5 F-E	5:52:30.5	5:52:29.4	-108.5	-0.5	117.4	1157.6	1275.0	114.8
6 F-W	5:55:27.5	5:55:26.6	-50.7	-0.2	127.6	959.5	991.6	93.7
7 F-E	5:58:46.5	5:58:45.4	7.2	0.0	112.9	1099.8	1232.2	116.8
8 F-W	6: 1:38.0	6: 1:37.1	-7.2	-0.0	127.3	1030.5	1031.8	87.1
9 F-E	6: 7:13.5	6: 7:12.2	32.8	0.2	112.7	1348.5	1428.9	109.6
10 F-W	6:10:15.0	6:10:13.9	49.5	0.2	127.0	1202.0	1204.8	93.9
11 F-E	6:14: 2.5	6:14: 1.2	246.5	1.3	111.4	1476.9	1509.3	101.9
12 F-W	6:18:11.5	6:18:10.4	-32.7	-0.1	126.2	1202.0	1204.0	93.3
13 F-E	6:22:25.5	6:22:24.1	161.0	0.8	111.1	1609.5	1625.4	98.0
14 F-W	6:26:26.0	6:26:24.7	421.3	1.9	123.0	1486.9	1498.7	97.2
15 F-E	6:32:16.0	6:32:14.4	201.5	1.0	109.7	1741.3	1766.5	99.7
16 F-W	6:36:16.5	6:36:15.1	73.0	0.3	125.2	1546.6	1547.2	91.6
18 F-W	6:45:19.0	6:45:17.1	178.8	0.8	127.1	2142.7	2156.5	96.5
19 F-E	6:49:31.5	6:49:29.3	40.0	0.2	111.5	2153.6	2473.4	119.5

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C6-7

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
206L
MIC #1G CENTERLINE CENTER, GROUND

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5:41:48.5	5:41:48.3	30.3	0.2	106.5	235.6	261.2	115.6
2 F-W	5:44: 7.0	5:44: 6.8	-97.2	-0.5	121.9	252.6	270.7	111.1
3 F-E	5:46:57.0	5:46:56.7	154.3	0.8	108.7	236.4	340.8	136.1
4 F-W	5:49:18.5	5:49:18.2	132.7	0.6	127.1	226.8	344.6	138.8
5 F-E	5:52:30.5	5:52:29.9	-108.5	-0.5	117.4	550.7	681.8	126.1
6 F-W	5:55:26.5	5:55:25.9	29.2	0.1	128.1	629.8	670.4	110.1
7 F-E	5:58:46.5	5:58:45.8	7.2	0.0	112.9	592.9	765.4	129.2
8 F-W	6: 1:35.5	6: 1:34.8	20.0	0.1	127.1	612.5	745.8	124.8
9 F-E	6: 7:14.5	6: 7:13.7	29.5	0.1	112.8	886.5	913.7	104.0
10 F-W	6:10: 9.0	6:10: 7.5	315.5	1.4	128.6	872.6	1694.8	149.0
11 F-E	6:14: 1.5	6:14: 0.6	290.2	1.5	111.3	925.0	1036.0	116.8
12 F-W	6:18: 9.0	6:18: 8.1	-81.2	-0.4	125.4	918.5	1076.4	121.4
13 F-E	6:22:22.5	6:22:21.1	81.0	0.4	112.3	1335.3	1556.0	120.9
14 F-W	6:26:23.5	6:26:22.1	230.7	1.1	122.6	1370.7	1559.5	118.5
15 F-E	6:32:13.5	6:32:12.1	180.3	0.9	111.3	1357.4	1541.3	118.3
16 F-W	6:36: 8.5	6:36: 6.4	61.0	0.3	122.3	1392.6	2316.9	143.1
18 F-W	6:45:14.5	6:45:12.5	161.0	0.7	125.0	1950.8	2289.9	121.6
19 F-E	6:49:32.0	6:49:30.0	21.3	0.1	111.5	1949.5	2228.5	119.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C6-8

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
206L
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
MAR 12,1981

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1	F-E	5:41:49.0	5:41:48.8	16.0	0.1	106.7	202.6	203.2	94.4
2	F-W	5:44: 6.5	5:44: 6.2	-40.8	-0.2	121.9	219.7	303.1	133.6
3	F-E	5:46:57.0	5:46:56.7	154.3	0.8	108.7	203.5	316.6	140.0
4	F-W	5:49:18.5	5:49:18.2	132.7	0.6	127.1	193.9	320.6	142.8
5	F-E	5:52:30.5	5:52:29.9	-108.5	-0.5	117.4	518.3	653.4	127.5
6	F-W	5:55:26.0	5:55:25.4	74.0	0.3	128.0	597.8	686.3	119.4
7	F-E	5:58:47.5	5:58:47.0	-42.5	-0.2	112.9	559.9	620.9	115.6
8	F-W	6: 1:35.5	6: 1:34.9	20.0	0.1	127.1	579.9	715.5	125.9
9	F-E	6: 7:13.5	6: 7:12.7	32.8	0.2	112.7	853.7	951.6	116.2
10	F-W	6:10:14.5	6:10:13.8	55.0	0.2	126.6	839.8	847.7	97.8
11	F-E	6:14: 1.5	6:14: 0.6	290.2	1.5	111.3	893.3	1005.7	117.4
12	F-W	6:18: 9.5	6:18: 8.6	-56.2	-0.3	125.7	885.9	987.7	116.2
13	F-E	6:22:20.5	6:22:18.9	-43.0	-0.2	112.0	1302.3	1785.9	133.2
14	F-W	6:26:23.0	6:26:21.6	111.8	0.5	122.5	1338.5	1578.5	122.0
15	F-E	6:32:11.5	6:32: 9.9	12.5	0.1	111.1	1324.7	1753.6	130.9
16	F-W	6:36:12.5	6:36:11.1	240.7	1.1	126.5	1360.0	1602.2	121.9
18	F-W	6:45:11.5	6:45: 9.1	110.5	0.5	125.3	1917.9	2719.1	135.1
19	F-E	6:49:29.0	6:49:26.7	179.5	0.9	111.5	1916.5	2554.7	131.4

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
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AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C6-9

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
206L
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
1 F-E	5:41:49.0	5:41:48.5	16.0	0.1	106.7	545.3	551.9	98.9
2 F-W	5:44: 6.5	5:44: 6.0	-40.8	-0.2	121.9	538.7	602.1	116.5
3 F-E	5:46:58.5	5:46:58.0	205.7	1.1	108.2	557.4	557.4	90.0
4 F-W	5:49:19.0	5:49:18.5	139.3	0.6	127.0	529.8	567.9	111.1
5 F-E	5:52:33.0	5:52:32.4	-109.0	-0.5	117.5	672.4	681.0	80.8
6 F-W	5:55:26.0	5:55:25.1	74.0	0.3	128.0	886.7	970.7	114.0
7 F-E	5:58:49.5	5:58:48.8	-30.0	-0.2	113.1	771.6	775.1	84.6
8 F-W	6: 1:35.5	6: 1:34.7	20.0	0.1	127.1	842.4	959.1	118.6
9 F-E	6: 7:17.5	6: 7:16.6	58.8	0.3	111.8	969.1	1020.1	71.8
10 F-W	6:10: 9.0	6:10: 7.4	315.5	1.4	128.6	1047.3	1810.8	144.7
11 F-E	6:14: 3.5	6:14: 2.7	218.0	1.1	110.3	922.3	928.2	96.5
12 F-W	6:18: 9.5	6:13: 8.4	-56.2	-0.3	125.7	1105.5	1204.9	113.4
13 F-E	6:22:24.0	6:22:22.7	112.8	0.6	111.5	1431.6	1519.2	109.6
14 F-W	6:26:24.0	6:26:22.5	250.0	1.1	124.3	1548.5	1685.7	113.3
15 F-E	6:32:12.5	6:32:11.0	105.8	0.5	110.7	1381.4	1669.9	124.2
16 F-W	6:36: 9.0	6:36: 6.9	177.8	0.8	126.9	1547.1	2318.0	138.1
18 F-W	6:45:14.5	6:45:12.4	161.0	0.7	125.0	2020.5	2347.1	120.6
19 F-E	6:49:30.0	6:49:27.8	155.7	0.2	111.2	2012.1	2504.4	126.5

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
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AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

Sub-Appendix C7 Summary

UH60A June 26, 1980
Flight Path Tracking Plots and Position Data

1. FLIGHT PATH TRACKING PLOTS

Event No.	Plot Fig No.	Operation				
21	C7-1	Takeoff				
23	"	"				
25	"	"				
27	"	"				
29	"	"				
31	"	"				
33	C7-2	Takeoff				
35	"	"				
39	"	"				
41	"	"				
22	C7-3	Approach				
24	"	"				
26	"	"				
28	"	"				
30	"	"				
32	"	"				
34	C7-4	Approach				
36	"	"				
38	"	"				
40	"	"				
42	"	"				
43	C7-5	500 Ft.	LFO	140 kts	Torque	90%
44	"	"		"		
45	"	"		"		
46	"	"		"		
47	"	"		"		

2. POSITION DATA TABLES

Table No.	Microphone
C7-1	MIc. 1, Centerline Center 4 ft.
C7-2	Mic. 1G, Centerline Center (Ground)
C7-3	Mic. 1H, Centerline Center 33 ft.
C7-4	Mic. 2, Centerline 150m West 4 ft.
C7-5	Mic. 3, Centerline 150m East 4 ft.
C7-6	Mic. 4, Sideline 164m North 4 ft.
C7-7	Mic. 5, Sideline 150m South 4 ft.
C7-8	Mic. 5G, Sideline 150m South (Ground)
C7-9	Mic. 6, Sideline 284m North 4 ft.

FIGURE C7-1

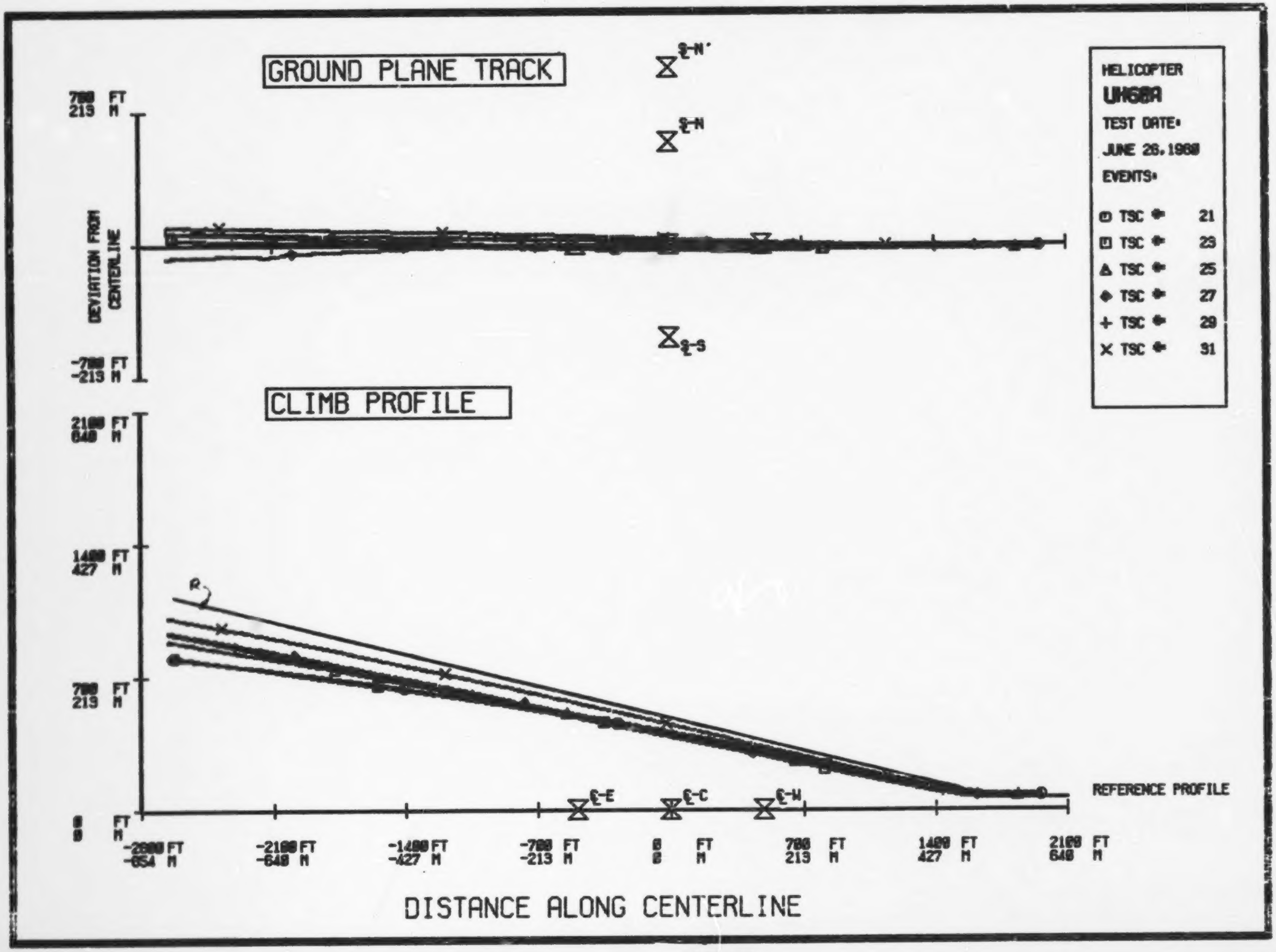

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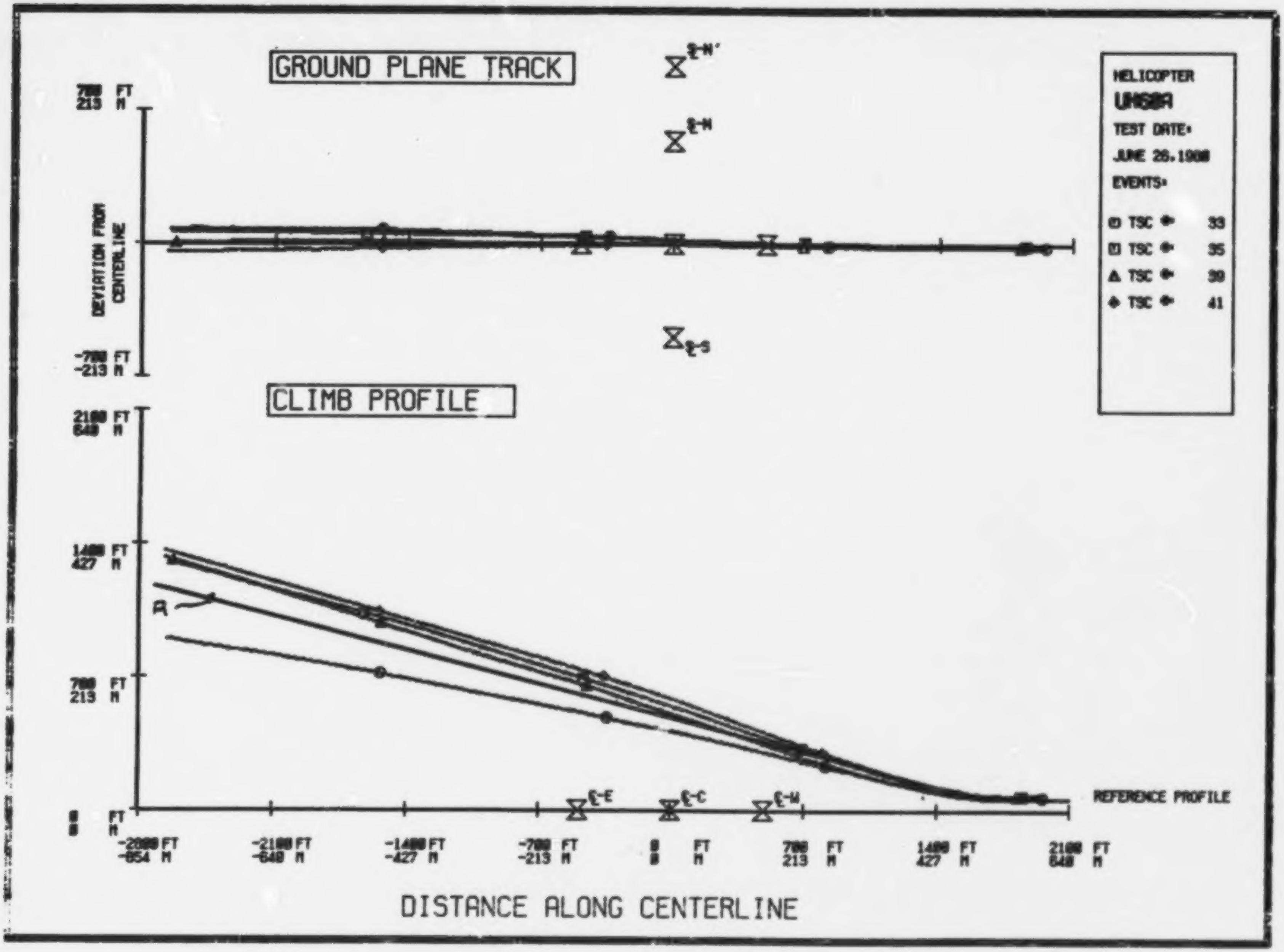
FIGURE C7-2



BEST DOCUMENT AVAILABLE

FIGURE C7-3

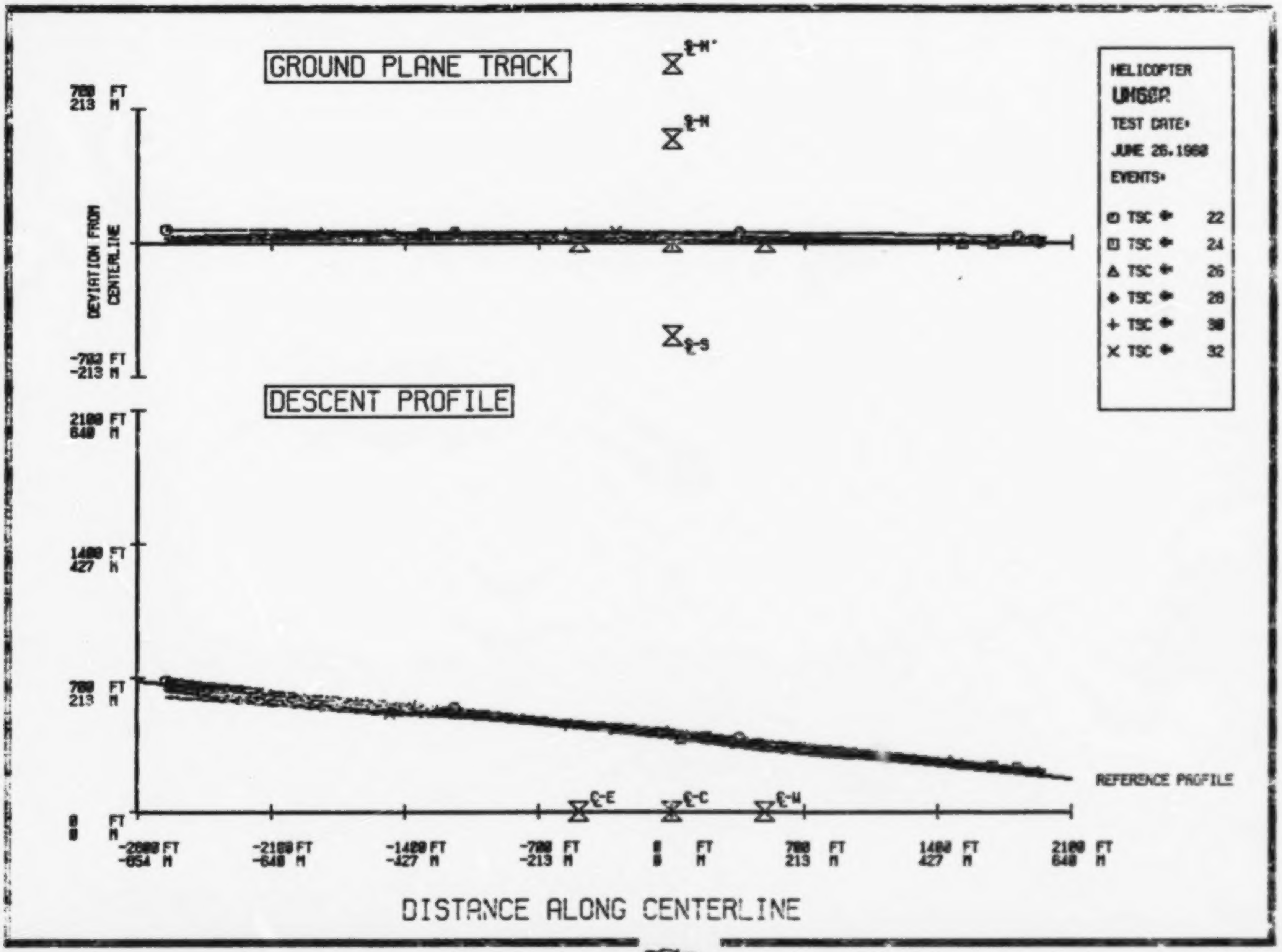

GROUND PLANE TRACK
DESCENT PROFILE
DEVIATION FROM CENTERLINE
700 FT 213 M
-700 FT -213 M
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
℄-N'
℄-N
℄-S
℄-E
℄-C
℄-W
REFERENCE PROFILE
HELICOPTER
UH60A
TEST DATE:
JUNE 26,1980
EVENTS:
○ TSC # 22
□ TSC # 24
△ TSC # 26
◆ TSC # 28
+ TSC # 30
× TSC # 32

FIGURE C7-4

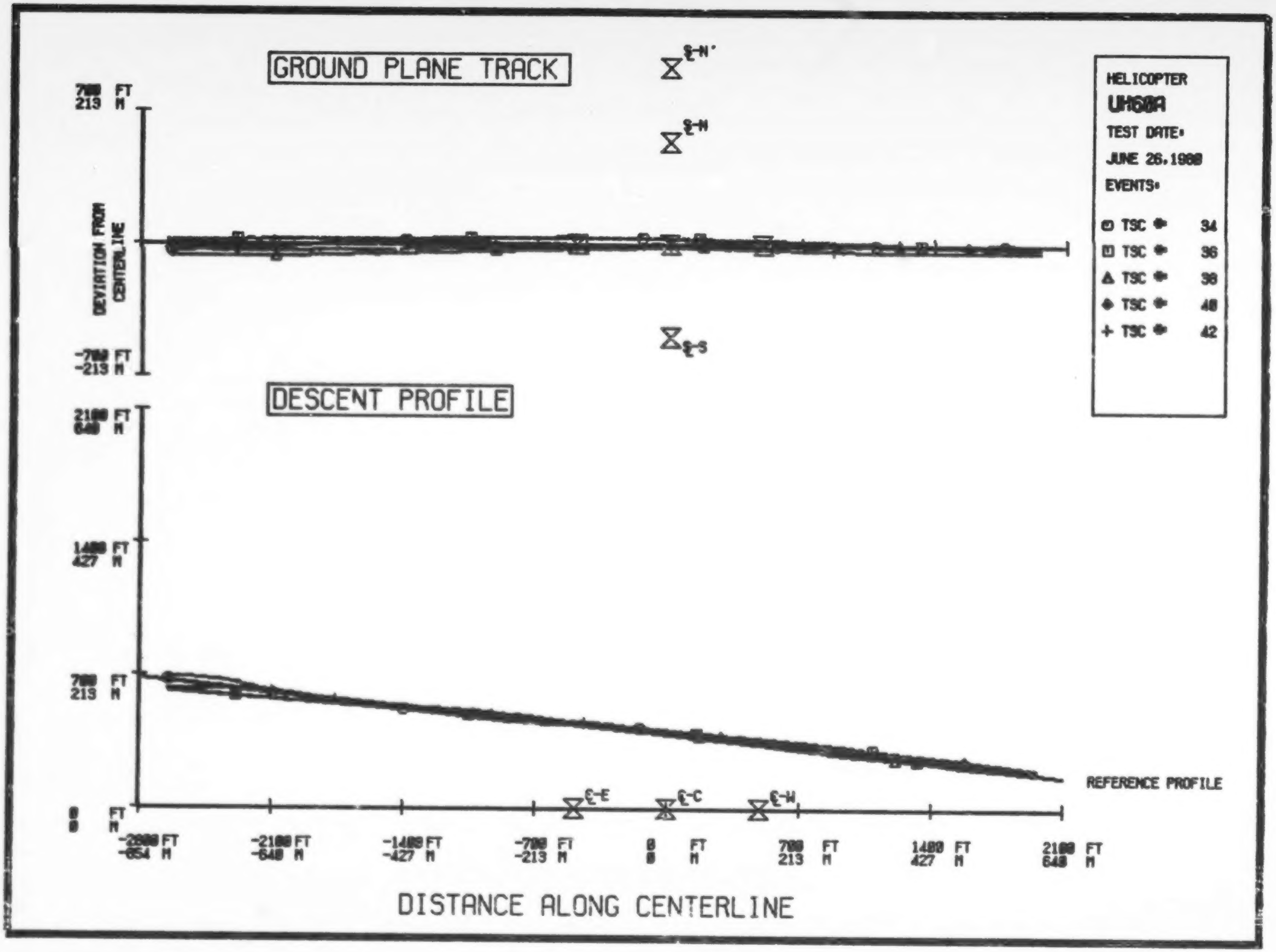

GROUND PLANE TRACK
℄-N'
℄-N
℄-S
700 FT 213 M
DEVIATION FROM CENTERLINE
-700 FT -213 M
HELICOPTER
UH60A
TEST DATE:
JUNE 26,1980
EVENTS:
○ TSC # 34
□ TSC # 36
△ TSC # 38
◆ TSC # 40
+ TSC # 42
DESCENT PROFILE
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
REFERENCE PROFILE
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE

FIGURE C7-5

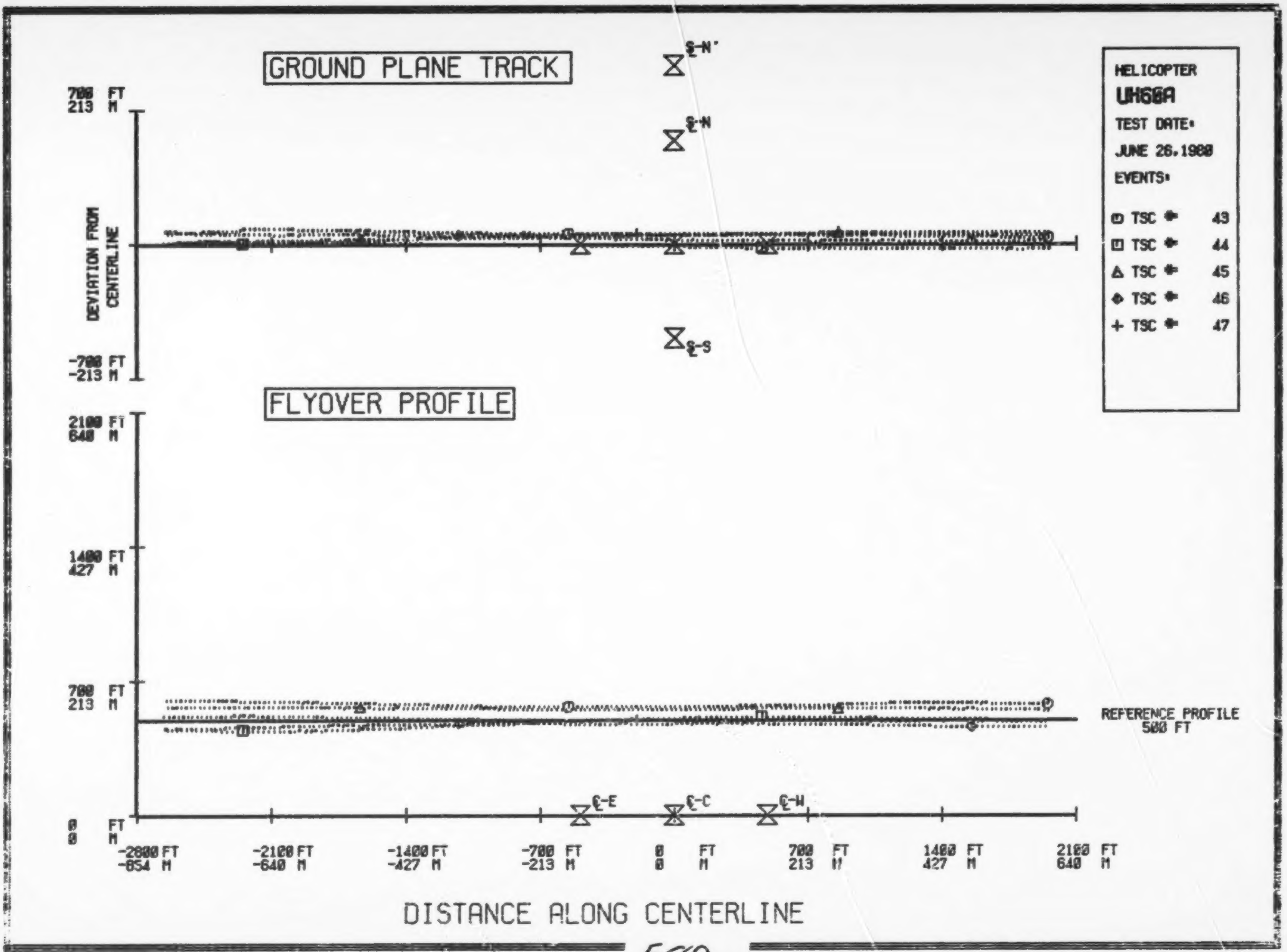

GROUND PLANE TRACK
FLYOVER PROFILE
700 FT 213 M
-700 FT -213 M
DEVIATION FROM CENTERLINE
℄-N'
℄-N
℄-S
2100 FT 640 M
1400 FT 427 M
700 FT 213 M
0 FT 0 M
REFERENCE PROFILE 500 FT
℄-E
℄-C
℄-W
-2800 FT -854 M
-2100 FT -640 M
-1400 FT -427 M
-700 FT -213 M
0 FT 0 M
700 FT 213 M
1400 FT 427 M
2100 FT 640 M
DISTANCE ALONG CENTERLINE
HELICOPTER
UH60A
TEST DATE:
JUNE 26,1980
EVENTS:
TSC # 43
TSC # 44
TSC # 45
TSC # 46
TSC # 47

TABLE C7-1

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
UH60A
MIC # 1 CENTERLINE CENTER, 4 FT

FAA/AEE 120
MAR 12,1981

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
21	DEP	7:26:30.0	7:26:29.7	1259.2	10.7	65.8	388.9	395.7	100.6
22	ARR	7:34:42.5	7:34:42.1	-922.5	-5.9	88.2	420.8	440.5	107.2
23	DEP	7:38:27.5	7:38:27.2	1440.3	11.7	69.0	370.1	370.6	92.8
24	ARR	7:42: 5.0	7:42: 4.6	-900.5	-5.7	88.4	403.3	428.3	109.7
25	DEP	7:45:30.0	7:45:29.7	1468.2	11.5	71.3	381.9	390.2	101.8
26	ARR	7:50:57.0	7:50:56.7	-1057.	-6.8	87.7	377.7	399.0	108.9
27	DEP	7:54: 1.0	7:54: 0.7	1582.7	12.3	71.7	374.8	376.4	95.3
28	ARR	7:58:35.0	7:58:34.6	-898.7	-5.6	90.1	404.8	431.4	110.2
29	DEP	8: 1:48.5	8: 1:48.1	1382.5	10.8	73.0	397.0	405.0	101.4
30	ARR	8: 7:23.0	8: 7:22.6	-731.0	-5.4	76.5	390.0	487.7	126.9
31	DEP	8:18:17.5	8:18:17.1	1676.2	13.6	68.4	430.9	435.1	97.9
32	ARR	8:23: 1.5	8:23: 1.1	-611.5	-5.1	87.7	403.5	497.7	125.8
33	DEP	8:26: 9.0	8:26: 8.6	1412.3	11.5	69.8	406.6	411.5	80.6
34	ARR	8:30:37.0	8:30:36.5	-407.0	-3.2	73.0	411.4	558.3	132.5
35	DEP	8:34:22.5	8:34:22.0	2168.3	17.3	68.7	519.4	592.6	61.2
36	ARR	8:39:48.5	8:39:47.9	-525.5	-4.1	71.7	403.2	646.6	140.9
38	ARR	8:49:11.0	8:49:10.6	-572.8	-5.0	94.1	396.5	492.5	127.3
39	DEP	8:52:21.5	8:52:21.1	2158.8	17.8	66.5	421.9	425.7	97.7
40	ARR	8:57: 6.5	8:57: 6.1	-878.5	-6.3	78.6	404.6	445.8	114.8
41	DEP	9: 0:44.5	9: 0:44.0	2221.2	17.8	66.5	551.5	614.4	63.8
42	ARR	9: 6: 4.5	9: 6: 4.1	-756.5	-5.6	76.8	403.5	459.0	118.5
44	F-W	9:11:42.0	9:11:41.4	451.0	1.6	160.7	520.2	649.2	129.6
45	F-E	9:13:54.5	9:13:53.8	-102.5	-0.4	143.1	549.7	746.9	132.6
46	F-W	9:16:13.0	9:16:17.4	-9.5	-0.0	157.9	474.5	664.5	134.4
47	F-E	9:18:36.0	9:18:35.4	32.7	0.1	148.8	494.9	733.8	137.6

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C7-2

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
UH60A
MIC #1G CENTERLINE CENTER, GROUND

FAA/AEE 120
JAN 17,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
21 DEP	7:26:29.0	7:26:28.6	1259.2	10.7	65.7	392.8	439.9	116.8
22 ARR	7:34:42.0	7:34:41.6	-870.2	-5.6	88.3	424.7	475.6	116.7
23 DEP	7:38:29.5	7:38:29.1	1438.8	11.7	68.8	374.0	427.7	61.0
24 ARR	7:42: 4.5	7:42: 4.1	-901.7	-5.8	88.4	407.3	463.0	118.4
25 DEP	7:45:30.0	7:45:29.7	1468.2	11.5	71.3	385.8	394.1	101.8
26 ARR	7:50:57.0	7:50:56.6	-1057.	-6.8	87.7	381.6	403.4	108.9
27 DEP	7:54: 0.5	7:54: 0.2	1590.3	12.3	71.8	378.7	392.7	105.4
28 ARR	7:58:35.5	7:58:35.1	-862.2	-5.4	89.9	408.8	416.1	100.7
29 DEP	8: 1:48.0	8: 1:47.6	1385.7	10.6	73.0	401.0	425.3	109.5
30 ARR	8: 7:23.0	8: 7:22.6	-731.0	-5.4	76.5	393.9	491.1	126.7
31 DEP	8:18:17.0	8:18:16.6	1663.9	13.5	68.5	434.8	452.2	106.0
32 ARR	8:23: 2.0	8:23: 1.6	-648.3	-5.4	67.3	407.4	470.0	119.9
33 DEP	8:26: 7.5	8:26: 7.1	1455.3	11.8	68.9	409.9	423.6	104.6
34 ARR	8:30:37.5	8:30:37.0	-403.7	-3.1	72.1	415.4	520.9	127.1
35 DEP	8:34:18.5	8:34:18.0	2279.5	18.4	67.7	523.2	554.7	109.4
36 ARR	8:39:50.0	8:39:49.6	-468.8	-3.7	71.1	412.2	514.3	126.7
38 ARR	8:49:14.5	8:49:14.1	-774.8	-6.9	62.9	400.5	407.9	79.0
39 DEP	8:52:22.0	8:52:21.6	2152.2	17.8	68.2	425.6	485.8	88.7
40 ARR	8:57: 6.0	8:57: 5.6	-855.0	-6.1	78.4	408.6	481.8	122.0
41 DEP	9: 0:42.5	9: 0:42.0	2415.8	19.0	69.1	555.2	557.0	85.4
42 ARR	9: 6: 4.5	9: 6: 4.1	-756.5	-5.6	76.8	407.5	463.3	112.4
43 F-E	9: 9:28.5	9: 9:28.0	-65.3	-0.2	149.5	563.4	568.4	90.0
44 F-W	9:11:42.0	9:11:41.4	451.0	1.6	160.7	504.2	652.2	129.4
45 F-E	9:13:56.0	9:13:55.5	-35.8	-0.1	148.3	553.7	560.0	98.6
46 F-W	9:16:18.0	9:16:17.4	-9.5	-0.0	157.9	478.5	667.3	134.2
47 F-E	9:18:37.5	9:18:37.1	26.2	0.1	148.7	495.9	512.0	103.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C7-3

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
UH60A
MIC #1H CENTERLINE CENTER, 33FT

FAA/AEE 120
MAR 12,1981

****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
21 DEP	7:26:30.0	7:26:29.7	1259.2	10.7	65.8	360.7	368.3	101.7
22 ARR	7:34:42.0	7:34:41.6	-870.2	-5.6	88.3	392.2	443.1	117.7
23 DEP	7:38:27.0	7:38:26.7	1435.3	11.6	69.1	341.9	352.8	104.3
24 ARR	7:42: 4.5	7:42: 4.1	-901.7	-5.8	88.4	374.6	430.4	119.5
25 DEP	7:45:30.0	7:45:29.7	1468.2	11.5	71.3	353.5	363.2	103.3
26 ARR	7:50:56.5	7:50:56.2	-1029.	-6.6	87.6	348.9	400.7	119.4
27 DEP	7:54: 1.0	7:54: 0.7	1582.7	12.3	71.7	346.5	348.8	96.6
28 ARR	7:58:35.5	7:58:35.2	-862.2	-5.4	89.9	376.0	382.4	100.5
29 DEP	8: 1:48.5	8: 1:48.2	1382.5	10.6	73.0	369.5	377.4	102.4
30 ARR	8: 7:23.5	8: 7:23.1	-736.0	-5.4	76.8	361.2	420.9	120.9
31 DEP	8:18:17.5	8:18:17.1	1678.2	13.6	68.4	402.8	407.9	99.0
32 ARR	8:23: 3.0	8:23: 2.7	-638.0	-5.3	67.3	374.9	393.2	107.6
33 DEP	8:26: 8.0	8:26: 7.7	1436.0	11.7	68.3	377.7	381.3	97.8
34 ARR	8:30:38.0	8:30:37.6	-440.7	-3.4	72.9	382.6	452.8	122.3
35 DEP	8:34:20.0	8:34:19.6	2265.8	18.8	69.1	492.0	492.0	90.0
36 ARR	8:39:50.0	8:39:49.6	-463.8	-3.7	71.1	379.4	485.4	128.6
38 ARR	8:49:14.0	8:49:13.7	-727.5	-6.5	60.1	367.7	369.0	85.2
39 DEP	8:52:21.5	8:52:21.1	2158.8	17.5	66.5	454.7	459.1	97.9
40 ARR	8:57: 7.0	8:57: 6.7	-902.3	-6.5	78.7	375.7	391.5	106.3
41 DEP	9: 0:42.0	9: 0:41.5	2438.0	19.3	68.7	524.3	524.9	92.7
42 ARR	9: 6: 5.0	9: 6: 4.7	-749.7	-5.5	76.5	324.7	402.0	111.2
44 F-W	9:11:43.0	9:11:42.6	333.8	1.2	161.0	471.3	433.2	102.2
45 F-E	9:13:55.5	9:13:55.0	-60.8	-0.2	143.1	580.9	563.8	112.5
46 F-W	9:16:19.5	9:16:19.1	-32.3	-0.1	159.8	445.6	445.6	90.2
47 F-E	9:18:37.5	9:18:37.1	26.2	0.1	142.7	460.1	478.3	103.0

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C7-4

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

FAA/AEE 120
MAR 12,1981

TEST DATE: JUNE 26,1980
UH60A
MIC # 2 CENTERLINE WEST, 4 FT
****

EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
21 DEP	7:26:26.5	7:26:26.2	1302.7	11.2	64.7	297.7	298.6	85.6
22 ARR	7:34:46.0	7:34:45.7	-882.5	-5.7	87.7	369.3	381.0	104.3
23 DEP	7:38:25.0	7:38:24.7	1363.5	11.1	68.7	275.4	317.6	60.1
24 ARR	7:42: 8.0	7:42: 7.7	-867.0	-5.5	88.5	355.1	398.1	116.3
25 DEP	7:45:28.0	7:45:27.7	1504.2	11.3	71.2	281.7	326.5	59.7
26 ARR	7:51: 0.5	7:51: 0.2	-944.7	-6.1	88.0	318.8	329.1	104.4
27 DEP	7:53:58.5	7:53:58.2	1511.5	11.8	71.5	272.6	303.8	63.9
28 ARR	7:58:38.5	7:58:38.2	-940.1	-6.0	89.0	358.6	372.8	105.8
29 DEP	8: 1:46.0	8: 1:45.7	1412.3	11.0	72.1	305.9	326.2	69.6
30 ARR	8: 7:28.0	8: 7:27.7	-723.8	-5.4	75.6	340.9	363.3	110.3
31 DEP	8:18:15.0	8:18:14.7	1650.9	13.3	69.0	316.3	340.6	69.2
32 ARR	8:23: 6.5	8:23: 6.1	-834.2	-7.0	67.0	343.4	405.3	122.1
33 DEP	8:26: 6.0	8:26: 5.7	1571.7	12.8	63.5	296.7	359.0	55.5
34 ARR	8:30:42.0	8:30:41.6	-638.8	-4.9	73.4	368.3	444.6	124.1
35 DEP	8:34:18.5	8:34:18.1	2279.5	19.4	67.7	384.5	462.3	52.0
36 ARR	3:39:55.5	8:33:55.2	-724.2	-5.8	70.2	356.5	381.7	110.9
38 ARR	8:49:16.0	8:49:15.6	-816.2	-7.4	62.1	334.6	424.6	128.0
39 DEP	8:52:18.0	8:52:17.7	2192.7	17.9	67.2	328.5	328.6	83.6
40 ARR	8:57:10.5	8:57:10.2	-886.7	-6.4	77.8	361.1	375.1	110.6
41 DEP	9: 0:41.5	9: 0:41.0	2453.8	19.5	68.3	380.5	538.7	45.9
42 ARR	9: 6: 3.5	9: 6: 8.1	-870.6	-6.4	77.1	350.1	395.4	117.7
43 F-E	9: 9:22.0	9: 9:20.7	36.0	0.1	147.1	566.3	1451.5	157.0
44 F-W	9:11:43.0	9:11:42.2	333.8	1.2	161.0	568.7	857.3	143.6
45 F-E	9:13:51.5	9:13:50.6	35.7	0.1	148.1	555.7	381.6	145.5
46 F-W	9:16:19.0	9:16:18.2	2.7	0.0	153.2	474.0	877.9	147.3
47 F-E	3:18:31.0	9:13:29.6	23.8	0.1	149.3	493.1	1575.5	161.3

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C7-5

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
UH60A
MIC # 3 CENTERLINE EAST, 4 FT

FAA/AEE 120
MAR 12,1981

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
21	DEP	7:26:38.0	7:26:37.5	1157.8	9.7	66.8	476.0	576.3	55.7
22	ARR	7:34:40.5	7:34:40.1	-812.2	-5.2	88.7	463.9	468.8	81.7
23	DEP	7:38:32.5	7:38:32.1	1336.0	10.8	69.1	469.8	476.5	80.3
24	ARR	7:42: 3.5	7:42: 3.1	-923.8	-5.9	87.6	454.0	469.0	75.5
25	DEP	7:45:36.0	7:45:35.6	1401.7	10.8	72.4	482.4	506.1	72.4
26	ARR	7:50:55.5	7:50:55.1	-1010.	-6.5	87.5	433.7	454.5	72.6
27	DEP	7:54: 6.5	7:54: 6.1	1618.8	12.5	71.9	482.1	503.3	73.3
28	ARR	7:58:32.0	7:58:31.6	-885.5	-5.5	91.0	454.1	472.0	105.8
29	DEP	8: 1:54.5	8: 1:54.0	1391.8	10.4	74.7	490.8	526.4	68.8
30	ARR	8: 7:20.0	8: 7:19.6	-776.0	-5.7	76.1	437.1	478.3	113.9
31	DEP	8:18:23.5	8:18:23.0	1606.7	12.0	68.8	544.8	566.7	74.0
32	ARR	8:23: 2.5	8:23: 2.0	-647.5	-5.4	67.7	448.8	545.4	55.4
33	DEP	8:26:15.5	8:26:15.0	1342.7	10.5	71.3	504.8	605.6	56.5
34	ARR	8:30:35.0	8:30:34.6	-413.7	-3.2	74.2	428.7	455.2	105.5
35	DEP	8:34:26.0	8:34:25.4	2092.5	16.2	69.5	667.9	702.4	72.0
36	ARR	8:39:47.5	8:39:47.1	-565.3	-4.5	71.2	440.4	456.4	105.2
38	ARR	8:49:10.0	8:49: 9.6	-612.8	-5.4	64.6	440.8	448.4	79.5
39	DEP	8:52:29.0	8:52:28.4	1917.2	16.3	64.7	632.2	703.8	63.9
40	ARR	8:57: 3.5	8:57: 3.1	-632.2	-4.6	77.6	455.1	460.3	98.6
41	DEP	9: 0:50.0	9: 0:49.3	2011.5	15.8	70.1	706.7	823.0	59.2
42	ARR	9: 6: 3.0	9: 6: 2.6	-795.7	-5.9	77.4	450.5	456.0	81.1
43	F-E	9: 9:30.0	9: 9:29.5	62.5	0.2	149.6	563.6	574.3	101.1
44	F-W	9:11:41.0	9:11:40.6	498.3	1.3	159.8	486.7	512.3	108.2
45	F-E	9:13:57.5	9:13:57.0	60.2	0.2	148.1	551.1	537.8	110.4
46	F-W	9:16:18.5	9:16:18.1	-5.8	-0.0	153.1	474.0	514.4	67.1
47	F-E	9:18:41.0	9:18:40.5	115.0	0.4	146.8	434.7	557.6	62.5

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C7-6

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
UH60A
MIC # 4 SIDELINE NORTH, 4 FT

FAA/AEE 120
MAR 12,1981

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
21	DEP	7:26:32.5	7:26:31.9	1197.3	10.1	66.2	688.5	709.6	76.0
22	ARR	7:34:40.0	7:34:39.3	-844.0	-5.4	89.0	604.6	821.6	132.6
23	DEP	7:38:29.0	7:38:28.4	1463.3	11.9	68.8	626.7	638.5	79.0
24	ARR	7:42: 3.0	7:42: 2.3	-935.0	-6.0	87.5	606.0	770.1	128.1
25	DEP	7:45:31.5	7:45:31.0	1507.5	11.8	71.4	614.0	617.2	84.2
26	ARR	7:50:55.5	7:50:54.9	-1010.	-6.5	87.5	607.4	716.2	122.0
27	DEP	7:54: 2.5	7:54: 1.9	1619.2	12.6	71.3	617.7	628.1	79.6
28	ARR	7:58:33.5	7:58:32.8	-909.5	-5.7	90.3	625.1	758.3	124.5
29	DEP	8: 1:49.5	8: 1:49.0	1407.0	10.7	73.5	621.3	621.5	88.6
30	ARR	8: 7:25.5	8: 7:25.0	-741.7	-5.5	75.8	599.6	600.0	87.9
31	DEP	8:18:19.0	8:18:18.4	1662.2	13.4	68.9	633.3	638.6	82.6
32	ARR	8:23: 2.5	8:23: 1.9	-647.5	-5.4	67.7	600.2	628.8	107.3
33	DEP	8:26: 8.0	8:26: 7.4	1436.0	11.7	68.3	620.5	627.2	98.4
34	ARR	8:30:30.0	8:30:28.7	-853.7	-6.4	74.7	619.2	1509.9	155.8
35	DEP	8:34:20.0	8:34:19.4	2265.8	18.2	68.1	702.1	703.3	93.3
36	ARR	8:39:50.0	8:39:49.4	-468.8	-3.7	71.1	614.2	694.3	117.8
38	ARR	8:49: 8.0	8:49: 7.2	-737.7	-6.3	65.7	643.5	945.6	137.1
39	DEP	8:52:22.0	8:52:21.4	2152.2	17.8	66.2	639.3	639.7	92.1
40	ARR	8:57: 9.0	8:57: 8.4	-867.7	-6.3	78.0	632.8	643.7	79.4
41	DEP	9: 0:41.5	9: 0:40.8	2453.8	19.5	68.3	742.1	754.1	100.3
42	ARR	9: 6: 4.0	9: 6: 3.4	-763.3	-5.6	77.2	647.7	712.3	114.6
43	F-E	9: 9:28.5	9: 9:27.9	-65.3	-0.2	149.5	716.0	716.8	92.6
44	F-W	9:11:43.5	9:11:42.9	260.5	0.9	160.7	707.9	708.0	90.7
45	F-E	9:13:56.5	9:13:55.9	-12.3	-0.0	148.5	705.1	705.5	89.1
46	F-W	9:16:18.5	9:16:17.8	-5.8	-0.0	158.1	666.9	747.9	116.9
47	F-E	9:18:38.0	9:18:37.4	11.7	0.0	147.9	659.2	659.5	91.7

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C7-7

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
UH60A
MIC # 5 SIDELINE SOUTH, 4 FT

FAA/AEE 120
MAR 12,1981

EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
21	DEP	7:26:31.5	7:26:31.0	1284.0	10.9	66.0	603.2	606.7	83.9
22	ARR	7:34:41.0	7:34:40.3	-832.2	-5.3	88.5	687.6	795.1	120.1
23	DEP	7:38:27.0	7:38:26.5	1435.3	11.6	69.1	604.4	613.0	99.6
24	ARR	7:42: 5.5	7:42: 4.9	-891.0	-5.7	88.1	664.6	672.3	98.6
25	DEP	7:45:30.5	7:45:29.9	1457.8	11.4	71.1	631.2	631.9	92.6
26	ARR	7:50:56.5	7:50:55.9	-1029.	-6.6	87.6	632.9	680.0	111.5
27	DEP	7:54: 2.0	7:54: 1.5	1607.5	12.6	71.3	619.1	622.3	84.1
28	ARR	7:58:35.5	7:58:34.9	-862.2	-5.4	89.9	648.7	657.6	99.4
29	DEP	8: 1:50.0	8: 1:49.4	1411.7	10.8	73.3	642.8	651.4	80.7
30	ARR	8: 7:24.0	8: 7:23.4	-742.8	-5.5	76.7	654.8	681.3	106.0
31	DEP	8:18:19.0	8:18:18.4	1662.2	13.4	68.9	673.2	682.4	80.6
32	ARR	8:23: 5.5	8:23: 4.9	-828.7	-6.9	67.4	670.1	681.3	79.4
33	DEP	8:26: 9.5	8:26: 8.9	1421.5	11.5	69.3	654.2	664.2	80.1
34	ARR	8:30:37.0	8:30:36.3	-407.0	-3.2	73.0	683.6	779.9	121.7
35	DEP	8:34:19.0	8:34:18.3	2226.7	18.0	67.6	723.0	738.9	99.9
36	ARR	8:39:55.0	8:39:54.4	-725.7	-5.8	70.0	663.4	709.2	69.3
38	ARR	8:49:15.5	8:49:14.9	-810.5	-7.3	62.5	620.1	641.7	75.1
39	DEP	8:52:23.0	8:52:22.4	2151.0	17.9	65.9	657.8	696.0	81.2
40	ARR	8:57: 7.0	8:57: 6.4	-902.3	-6.5	78.7	641.1	655.8	102.2
41	DEP	9: 0:48.5	9: 0:47.6	2073.7	16.3	70.1	730.0	1015.2	46.5
42	ARR	9: 6: 5.5	9: 6: 4.9	-813.9	-6.0	76.3	624.7	637.7	101.6
43	F-E	9: 9:27.5	9: 9:26.9	-90.0	-0.3	149.5	720.1	343.3	112.3
44	F-W	9:11:43.0	9:11:42.4	333.8	1.2	161.0	695.1	714.3	103.3
45	F-E	9:13:55.0	9:13:54.2	-77.8	-0.3	148.2	763.9	875.7	118.6
46	F-W	9:16:18.5	9:16:17.3	-5.8	-0.0	158.1	699.7	794.6	118.3
47	F-E	9:18:36.5	9:18:35.7	40.7	0.2	145.5	724.4	858.3	121.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

TABLE C7-8

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
UH60A
MIC #5G SIDELINE SOUTH, GROUND

FAA/AEE 120
MAR 12,1981

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EVENT	RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
21 DEP	7:26:31.5	7:26:31.0	1284.0	10.9	66.0	605.7	609.3	83.8
22 ARR	7:34:43.5	7:34:42.9	-945.2	-6.1	87.9	690.0	690.3	91.6
23 DEP	7:38:27.5	7:38:27.0	1440.3	11.7	69.0	606.8	608.0	93.6
24 ARR	7:42: 5.5	7:42: 4.9	-891.0	-5.7	83.1	667.0	675.3	99.0
25 DEP	7:45:30.5	7:45:29.9	1457.8	11.4	71.1	633.6	634.2	92.5
26 ARR	7:50:57.0	7:50:56.4	-1057.	-6.8	87.7	635.2	658.4	105.2
27 DEP	7:54: 2.0	7:54: 1.5	1607.5	12.6	71.3	621.4	624.8	84.1
29 DEP	8: 1:50.0	8: 1:49.4	1411.7	10.9	73.3	645.3	653.9	80.7
30 ARR	8: 7:25.0	8: 7:24.4	-732.0	-5.4	76.0	657.1	658.6	93.9
31 DEP	8:18:19.5	8:18:18.9	1644.9	13.3	69.0	675.6	696.5	75.9
32 ARR	8:23: 4.0	8:23: 3.4	-786.2	-6.6	67.0	672.5	674.7	94.7
33 DEP	8:26: 8.5	8:26: 7.9	1424.5	11.5	69.0	656.6	656.7	89.3
34 ARR	8:30:37.0	8:30:36.3	-407.0	-3.2	73.0	666.0	782.2	121.6
35 DEP	8:34:19.0	8:34:18.3	2286.7	18.5	67.6	730.7	741.3	99.7
36 ARR	8:39:52.0	8:39:51.4	-606.5	-4.9	70.3	665.8	672.3	98.0
38 ARR	8:49:14.0	8:49:13.5	-727.5	-6.5	63.1	622.6	622.7	91.0
39 DEP	8:52:23.5	8:52:22.9	2134.5	17.8	65.8	690.5	709.4	76.7
40 ARR	8:57: 7.5	8:57: 6.9	-897.0	-6.4	78.4	643.6	647.5	96.3
41 DEP	9: 0:43.0	9: 0:42.3	2391.0	18.7	69.6	738.8	744.1	83.2
42 ARR	9: 6: 2.5	9: 6: 1.8	-824.3	-6.0	77.1	627.2	827.4	130.7
43 F-E	9: 9:27.0	9: 9:26.2	-126.5	-0.5	149.3	783.0	908.8	120.5
44 F-W	9:11:43.0	9:11:42.4	333.8	1.2	161.0	698.0	717.1	103.3
45 F-E	9:13:55.0	9:13:54.2	-77.8	-0.3	143.2	771.7	878.2	118.5
46 F-W	9:16:18.5	9:16:17.8	-5.8	-0.0	158.1	702.5	797.0	118.2
47 F-E	9:18:36.5	9:18:35.7	40.7	0.2	148.5	737.1	861.9	121.2

REC. TIME: TIME PNLTM WAS RECORDED, RAD. TIME: TIME PNLTM WAS RADIATED
R/C: AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG: CLIMB OR DESCENT ANGLE
GS: GROUND SPEED, CPA: CLOSEST POINT OF APPROACH
SR: SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG: ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

597

TABLE C7-9

POSITION DATA
HELICOPTER NOISE MEASURMENT PROGRAM

TEST DATE: JUNE 26,1980
UH60A
MIC # 6 SIDELINE NORTH, 4 FT

FAA/AEE 120
MAR 12,1981

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EVENT		RECORDED TIME	RADIATED TIME	R/C FPM	C/D-ANG DEG	GS KNOTS	CPA FT	SR FT	AR-ANG DEG
21	DEP	7:26:25.5	7:26:24.4	1351.5	11.6	64.9	1036.2	1227.6	122.4
22	ARR	7:34:37.5	7:34:36.3	-997.3	-6.3	39.1	970.7	1408.4	136.4
23	DEP	7:38:24.5	7:38:23.5	1371.3	11.1	68.8	1014.7	1122.3	115.3
24	ARR	7:42: 0.5	7:41:59.3	-932.0	-6.0	87.9	978.9	1345.4	133.3
25	DEP	7:45:26.5	7:45:25.5	1503.7	11.9	70.8	995.8	1172.1	121.8
26	ARR	7:50:56.0	7:50:55.1	-1021.	-6.6	87.5	989.6	1045.7	108.9
27	DEP	7:53:58.5	7:53:57.5	1511.5	11.8	71.5	1002.6	1094.2	113.6
28	ARR	7:58:35.0	7:58:34.1	-898.7	-5.6	90.1	1000.8	1026.5	102.8
29	DEP	8: 1:45.0	8: 1:44.0	1462.3	11.4	71.9	999.1	1187.2	121.1
30	ARR	8: 7:20.0	8: 7:18.9	-778.0	-5.7	76.1	976.3	1237.9	127.9
31	DEP	8:18:13.5	8:18:12.4	1669.7	13.3	69.8	1000.6	1193.6	123.0
32	ARR	8:23: 2.5	8:23: 1.6	-647.5	-5.4	67.7	971.8	995.0	102.4
33	DEP	8:26: 4.0	8:26: 3.0	1592.3	13.1	67.6	954.8	1192.1	122.7
34	ARR	8:30:36.5	8:30:35.5	-395.0	-3.0	73.2	990.0	1103.4	116.2
35	DEP	8:34:15.5	8:34:14.4	2196.2	17.7	67.8	1048.9	1232.1	121.6
36	ARR	8:39:50.0	8:39:49.1	-468.8	-3.7	71.1	986.7	1050.1	110.0
38	ARR	8:49: 8.5	8:49: 7.4	-718.0	-6.2	65.3	1025.7	1225.8	123.2
39	DEP	8:52:17.5	8:52:16.4	2182.7	17.8	67.2	1048.5	1223.4	121.0
40	ARR	8:57: 7.5	8:57: 6.6	-897.0	-6.4	78.4	1010.1	1019.5	97.8
41	DEP	9: 0:39.0	9: 0:38.0	2442.6	19.6	67.7	1086.0	1182.5	113.3
42	ARR	9: 6: 1.5	9: 6: 0.4	-874.7	-6.4	77.5	1029.0	1232.0	123.5
43	F-E	9: 9:27.0	9: 9:26.0	-126.5	-0.5	149.3	1046.2	1168.7	116.5
44	F-W	9:11:43.0	9:11:42.0	333.8	1.2	161.0	1064.7	1092.8	103.0
45	F-E	9:13:54.5	9:13:53.4	-102.5	-0.4	142.1	1029.0	1195.4	119.6
46	F-W	9:16:19.5	9:16:18.6	-32.8	-0.1	158.8	1024.3	1033.2	97.5
47	F-E	9:18:38.5	9:18:37.6	-16.9	-0.1	143.4	1066.3	1006.8	88.2

REC. TIME:TIME PNLTM WAS RECORDED, RAD. TIME:TIME PNLTM WAS RADIATED
R/C:AIRCRAFT RATE OF CLIMB OR DESCENT, C/D-ANG:CLIMB OR DESCENT ANGLE
GS:GROUND SPEED, CPA:CLOSEST POINT OF APPROACH
SR:SLANT RANGE TO AIRCRAFT AT TIME PNLTM WAS RADIATED
AR-ANG:ACOUSTIC RADIATION ANGLE BETWEEN FLIGHT PATH AND SLANT RANGE

APPENDIX D

COCKPIT INSTRUMENT DATA

Appendix D

COCKPIT DATA

During each event of the June 1980 Helicopter Noise Measurement program cockpit photos were taken. The slides were projected onto a screen (considerably enlarged) making it possible to read the instruments with reasonable accuracy. The photos were supposed to be taken when aircraft was directly over the centerline-center microphone site. Although this was not achieved in each case the cockpit photos reflect the helicopter "stabilized" configuration during the test event. One important caution is necessary in interpreting the photographic information; the snapshot freezes instrument readings at one moment of time whereas most readings are constantly changing by a small amount as the pilot "hunts" for the reference condition. Thus fluctuations above or below reference conditions are to be anticipated. The instrument readings are most useful in terms of verifying the region of operation for different parameters.

Each table within this appendix provides the following information:

Slide Run No.	This event number along with the test date provides a cross reference to other data.
Slide Time	The time off the range control synchronized clock consistent with acoustical and tracking time bases.
Slide Event Type	This specifies the event type as identified on the cockpit "event board".
Altimeter	Specifies the barometeric altimeter reading, one of the more stable indicators.
IAS	Indicated airspeed a fairly stable indicator.
Rotor Speed	Main Rotor speed in RPM or percent, a very stable indicator.
Torque	The torque on the main rotor shaft, a fairly stable value.
Verticle Speed	The rate of ascent or descent, a rather sensitive and variable indicator.
Heading	The compass magnetic heading which fluctuates around the target heading.

Appendix D

The tables in Appendix D are organized by helicopter type.

Table	Helicopter	Test Date	Events
D1-1	UH-60A	6-22	1-11
D1-2		6-22	12-26
D1-3		6-22	27-42
D1-4		6-22	43-52
D1-5		6-25	56-69
D1-6		6-25	70-77
D1-7		6-26	21-34
D1-8		6-26	35-49
D1-9		6-26	49-50
D2-1	S-76	6-23	1-15
D2-2		6-23	16-29
D2-3		6-23	30-43
D2-4		6-23	44-56
D2-5		6-23	58-70
D2-6		6-25	1-14
D2-7		6-25	15-28
D2-8		6-25	29-42
D2-9		6-25	43-55
D3-1	A-109	6-24	1-14
D3-2		6-24	15-28
D3-3		6-24	29-42
D3-4		6-24	43-56
D3-5		6-24	57-64
D4-1	B-206-L	6-26	1-14
D4-2		6-26	15-20

TABLE D1-1

HELICOPTER COCKPIT DATA
UH-60A - 1 of 9

Helicopter: UH-60A

Test Date: 6/22/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
A-T1	TO A-T1	5:35:05	60'	75	100%	98%	500	265
A-T2	A-T2	5:39:00	450'	75	100%	13%	-800	260
A-1	LFO 1000'	5:47:15	1030'	155	100%	88%	0	80
A-12	LFO	5:53:44	1000'	153	100%	96%	-100	260
A-2	LFO	5:51:08	1000'	153	100%	94%	0	80
A-3	LFO	5:54:54	990'	155	100%	83%	-500	270
A-4	LFO	6:02:09	995'	150	100%	87.5%	-100	85
A-5	LFO	6:06:33	995'	155	100%	92%	0	265
A-6	LFO	6:08:34	1000'	153	100%	90%	-100	85
B-7	TO	6:14:53	360'	75	100%	97%	1900	265
B-8	TO	6:18:57	300'	85	100%	105%	1900	265
B-9	TO	6:22:56	300'	75	100%	100%	1400	265
B-10	TO	6:27:54	380'	74	100%	100%	2000	265
B-11	TO	6:32:53	300'	71	100%	101%	2000	265

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

BEST DOCUMENT AVAILABLE

TABLE D1-2

HELICOPTER COCKPIT DATA
UH-60A - 2 of 9

Helicopter: UH-60A

Test Date: 6/22/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
B-12	TO	6:35:51	550'	70	100%	99%	2010	265
B-13	TO	6:40:23	XXX	60	100%	91%	100	265
B-14	TO	6:44:13	180'	78	100%	98%	1500	260
B-15	TO	6:48:49	100'	82	100%	103%	1000	65
B-16	APP	6:53:56	420'	72	100%	20%	-800	270
B-17	APP	6:58:04	390'	70	100%	22%	-900	270
B-18	APP	7:03:11	350'	68	100%	20%	-800	270
B-19	APP	7:08:13	390'	69	100%	17%	-800	265
B-20	APP	7:13:00	310'	70	100%	19%	-1900	270
B-21	APP	7:17:10	340'	70	100%	20%	-1800	270
B-22	APP	7:23:30	300'	70	100%	17%	-1900	270
B-23	APP	8:10:00	250'	70	100%	22%	-800	265
C-25	LFO .9 Vy	8:18:52	550'	152	100%	93.5%	0	80
C-26	LFO .8 Vy	8:22:37	550'	132	100%	68%	100	265

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

XXX : photo obscured

TABLE D1-3

HELICOPTER COCKPIT DATA
UH-60A - 3 of 9

Helicopter: UH-60A **Test Date: 6/22/80**

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
C-27	LFO .7 Vy	8:25:43	500'	120	100%	52.5%	0	80
C-28	LFO .9 Vy	8:27:15	550'	150	100%	89%	200	265
C-29	LFO .8 Vy	8:29:00	520'	132	100%	71%	0	80
C-30	LFO .7 Vy	8:32:45	520'	115	100%	58%	0	265
C-31	LFO .9 Vy	8:35:19	520'	148	100%	77%	-100	85
C-32	LFO .8 Vy	8:38:08	520'	130	100%	69.5%	0	265
C-33	LFO .7 Vy	8:42:38	500'	115	100%	60%	0	85
C-34	LFO .9 Vy	8:46:23	540'	150	100%	83%	0	265
C-37	LFO 1500'	9:01:13	1500'	150	100%	92%	0	85
D-38	LFO 1500'	9:06:55	1520'	150	100%	88%	0	265
D-39	LFO 1000'	9:08:29	1040'	150	100%	82%	0	85
D-40	LFO 1000'	9:12:45	1000'	150	100%	86%	0	265
D-41	LFO 700'	9:15:08	700'	150	100%	90%	100	85
D-42	LFO 700'	9:20:34	720'	152	100%	88%	0	265

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D1-4

HELICOPTER COCKPIT DATA
UH-60A - 4 of 9

Helicopter: UH-60A

Test Date: 6/22/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
D-43	LFO 300'	9:23:59	350'	150	100%	81%	-250	85
D-44	LFO 300'	9:27:43	310'	152	100%	92%	-100	265
D-45	LFO 1500'	9:31:13	1500'	152	100%	89%	-100	85
D-46	LFO 1500'	9:35:39	1420'	152	100%	93%	400	265
D-47	LFO 1000'	9:43:46	1020'	150	100%	89%	100	85
D-48	LFO 1000'	9:48:33	990'	150	100%	91%	100	265
CC-49	VH 500'	9:51:30	490'	160	100%	100%	0	85
CC-50	VH 500'	9:54:23	450'	160	100%	101%	250	265
CC-51	VH 500'	9:57:31	500'	160	100%	99%	100	340
CC-52	.6 Vy 500'	9:59:30	490'	100	100%	49%	100	265

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D1-5

HELICOPTER COCKPIT DATA
UH-60A - 5 of 9

Helicopter: UH-60A

Test Date: 6/25/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
D-56	LFO 300'	8:21:13	360'	150	100%	101%	300	85
D-57	LFO 300'	8:24:16	300'	150	XXX	XXX	XXX	XXX
D-58	LFO 300'	8:26:15	380'	154	100%	92%	0	83
D-59	LFO 300'	8:29:47	380'	154	100%	91%	50	265
D-60	LFO 700'	8:31:23	730'	152	100%	90%	200	83
D-61	LFO 700'	8:35:35	750'	152	100%	88%	0	260
D-62	LFO 700'	8:38:35	740'	154	100%	97%	200	84
D-63	LFO 700'	8:42:33	740'	154	100%	88%	100	260
D-64	LFO 1000'	8:46:00	1000'	150	100%	88%	0	81
D-65	LFO 1000'	8:47:19	1000'	154	100%	83%	0	260
D-66	LFO 1000'	8:53:13	1000'	152	100%	90%	0	81
D-67	LFO 1000'	8:55:24	1000'	152	100%	89%	50	260
D-68	LFO 1500'	8:58:15	1500'	154	100%	92%	-50	84
D-69	LFO 1500'	9:02:10	1500'	150	100%	91%	0	260

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

XXX : photo obscured

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TABLE D1-6

HELICOPTER COCKPIT DATA
UH-60A - 6 of 9

Helicopter: UH-60A

Test Date: 6/25/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
D-70	LFO 1500'	9:05:05	1500'	154	100%	95%	50	81
D-71	LFO 1500'	9:09:51	1500'	154	100%	95%	0	260
D-72	LFO 2000'	9:13:20	1980'	155	100%	96%	0	85
D-73	LFO 2000'	9:17:41	2000'	150	100%	91%	0	260
D-74	LFO 2000'	9:22:39	2000'	150	100%	87%	0	83
D-75	LFO 2000'	9:25:16	2000'	152	100%	92%	0	265
D-76	LFO 2500'	9:29:19	2500'	152	100%	97%	0	85
D-77	LFO 2500'	9:32:00	2500'	155	100%	96%	100	265

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D1-7

HELICOPTER COCKPIT DATA
UH-60A - 7 of 9

Helicopter: UH-60A

Test Date: 6/26/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
B-21	TO H+10	7:27:23	350'	55	100%	78%	1000	86
B-22	APP Vy + 10	7:35:53	450'	75	100%	18%	-900	265
B-23	TO H + 10	7:39:34	525'	63	100%	82%	1400	84
B-24	APP Vy + 10	7:41:08	510'	75	100%	25%	-900	260
B-25	TO H + 10	7:46:45	710'	74	100%	84%	1500	86
B-26	APP Vy + 10	7:51:07	300'	79	100%	30%	-800	265
B-27	TO H + 10	7:54:08	410'	70	100%	87%	1500	85
B-28	APP Vy + 10	7:59:54	180'	75	100%	19%	-900	270
B-29	TO H + 10	8:02:00	580'	78	100%	83%	1500	85
B-30	APP Vy-10	8:13:34	310'	60	100%	26%	-800	260
B-31	TO H + 10	8:19:22	590'	75	100%	86%	1500	86
B-32	APP Vy - 10	8:24:19	160'	50	100%	35%	-700	280
B-33	TO H + 10	8:26:14	440'	70	100%	85%	1500	84
B-34	APP Vy - 10	8:31:27	410'	60	100%	31%	-500	260

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

BEST DOCUMENT AVAILABLE

table D1-8

HELICOPTER COCKPIT DATA
UH-60A - 8 of 9

Helicopter: UH-60A

Test Date: 6/26/80

Slide Run No.	Slide Event Type		Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
B-35	TO MAX		8:35:08	670'	85	100%	99%	2010	85
B-36	APP Vy - 10		8:40:57	380'	56	100%	25%	-600	270
B-37	TO MAX		8:44:47	650'	85	100%	98%	2100	85
B-38	APP Vy		8:49:33	210'	48	100%	34%	-500	260
B-39	TO MAX		8:53:31	640'	81	100%	95%	1900	89
B-40	APP Vy		8:58:18	310'	65	100%	23%	-800	265
B-41	TO MAX		9:01:49	610'	85	100%	98%	2010	83
B-42	APP Vy		9:07:02	200'	65	100%	19.5%	-900	265
D-43	LFO	152 Kt	9:10:23	560'	145	100%	98%	0	86
D-44	LFO	152 Kt	9:13:47	510'	150	100%	89%	100	85
D-45	LFO	152 Kt	9:15:54	550'	150	100%	106%	100	85
D-46	LFO	152 Kt	9:17:25	490'	150	100%	97%	0	260
D-47	LFO	152 Kt	9:19:35	500'	153	100%	93%	0	85
H-49	LFO 1000'		9:27:23	940'	21	100%	75%	-400	118

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D1-9

HELICOPTER COCKPIT DATA
UH-60A - 9 of 9

Helicopter: UH-60A

Test Date: 6/26/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
H-49	LFO 1000'	9:28:26	1000'	20	100%	77%	0	112
H-49	LFO 1000'	9:29:39	1000'	20	100%	77%	0	100
H-50	LFO 1500'	9:32:10	1500'	XXX	100%	58%	-400	174
H-50	LFO 1500'	9:33:00	1500'	XXX	100%	58%	-400	174
H-50	LFO 1500'	9:33:27	1390'	XXX	100%	69%	-200	165
H-50	LFO 1500'	9:33:44	1360'	XXX	100%	71%	-100	160

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

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BEST DOCUMENT AVAILABLE

TABLE D2-1

HELICOPTER COCKPIT DATA
S-76 - 1 of 9

Helicopter: S-76 Test Date: 6/23/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
A1	LFO 1000'	5:16:02	960'	142	108%	78%	-50	262
A2	LFO 1000'	5:18:17	970'	140	100%	80%	250	270
A3	LFO 1000'	5:21:36	980'	138	100%	76%	50	264
A4	LFO 1000'	5:24:50	960'	138	100%	76%	200	272
D5	LFO 1500'	5:28:08	1540'	140	100%	78%	100	262
D6	LFO 1500'	5:31:26	1510'	140	100%	73%	-100	72
D7	LFO 700'	5:34:16	748'	140	100%	78%	150	262
D8	LFO 700'	5:35:15	760'	140	100%	76%	100	76
D9	LFO 300'	5:38:49	300'	138	100%	80%	100	260
D10	LFO 300'	5:40:26	300'	138	100%	58%	-150	270
D11	LFO 1500'	5:44:42	1450'	142	100%	69%	-200	264
D12	LFO 1500'	5:46:51	1410'	140	100%	76%	0	80
D13	LFO 700'	5:48:03	710'	140	100%	71%	-50	264
D14	LFO 700'	5:50:24	690'	143	100%	64%	-250	76
D15	LFO 300'	5:53:21	300'	140	100%	84%	50	264

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D2-2

HELICOPTER COCKPIT DATA

S-76 - 2 of 9

Helicopter: S-76 Test Date: 6/23/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
D16	LFO 300'	5:56:24	300'	140	160%	69%	-150	80
C17	LFO 500' 140 Kt	5:59:16	500'	140	100%	77%	50	266
C18	LFO 500' 140 Kt	6:03:08	510'	142	100%	66%	-150	76
C19	LFO 500' 140 Kt	6:07:32	510'	140	100%	71%	50	266
C-20	LFO 500' 1-10 Kt	6:08:28	510'	142	108%	68%	-150	72
C-21	LFO 500' 93 Kt	6:12:04	520'	93	100%	40%	100	266
C-22	LFO 500' 93 Kt	6:14:54	530'	95	100%	34%	-150	70
C-23	LFO 500' 93 Kt	6:16:56	480'	93	100%	40%	0	270
C-24	LFO 500' 93 Kt	6:18:00	520'	100	100%	30%	-150	72
C-25	LFO 500' 155 Kt	6:27:32	510'	150	100%	88%	100	266
C-26	LFO 500' 155 Kt	6:29:00	540'	155	100%	96%	100	76
C-27	LFO 500' 155 Kt	6:32:49	470'	155	100%	94%	100	266
C-28	LFO 500' 155 Kt	6:34:54	510'	155	100%	96%	-100	70
C-29	LFO 500' 105 Kt	6:37:02	460'	109	100%	45%	-100	264

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D2-3

HELICOPTER COCKPIT DATA
S-76 - 3 of 9

Helicopter: S-76 Test Date: 6/23/80

Slide Run No.	Slide Event Type			Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
C-30	LFO	500'	109 Kt	6:39:44	500'	110	100%	45%	-50	72
C-31	LFO	500'	109 Kt	6:41:43	490'	109	100%	40%	-50	268
C-32	LFO	500'	109 Kt	6:44:35	480'	56	100%	45%	-50	72
B-33	TO			7:22:38	XXX	82	100%	95%	450	72
B-34	APA			7:25:06	XXX	60	100%	22%	-650	260
B-35	TO			7:29:50	480'	70	100%	100%	1700	76
B-36	APP			7:32:52	XXX	70	100%	22%	-600	270
B-37	TO			7:34:46	120'	70	100%	105%	1200	76
B-38	APP			7:36:50	XXX	70	100%	24%	-600	77
B-39	TO			7:39:00	220'	70	100%	105%	1010	72
B-40	APP			7:40:50	XXX	70	100%	20%	-700	270
B-41	TO			7:46:00	220'	70	100%	100%	1010	70
B-42	APP			7:49:29	XXX	70	100%	20%	-700	270
B-43	TO			7:52:41	180'	63	100%	62%	1000	80

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

XXX : photo obscured

TABLE D2-4

HELICOPTER COCKPIT DATA
S-76 - 4 of 9

Helicopter: S-76 Test Date: 6/23/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
B-44	APP	7:54:12	200'	62	100%	27%	550	270
E-45	LFO 1000'	8:00:09	960'	139	100%	75%	300	79
E-46	LFO 1000'	8:02:00	XXX	142	100%	80%	0	76
E-47	LFO 1000'	8:05:10	920'	140	100%	75%	0	76
E-48	LFO 1000'	8:08:00	XXX	140	100%	70%	-50	260
C-49	LFO 500' 124 Kt	8:10:30	510'	124	100%	55%	0	76
C-50	LFO 500' 124 Kt	8:13:41	460'	124	100%	55%	50	260
C-51	LFO 300' 124 Kt	8:16:55	470'	124	100%	55%	0	76
C-52	LFO 300' 124 Kt	8:19:27	490'	124	100%	53%	200	260
B-53	TO	9:22:09	80'	75	100%	110%	600	-14
B-54	APP	8:26:09	220'	77	100%	24%	-200	260
B-55	TO	8:28:17	180'	70	100%	93%	1010	74
B-56	APP	8:41:26	XXX	77	100%	24%	-600	260
C-51	LFO 500' 140 Kt	8:46:30	520'	142	107%	70%	0	74

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

XXX : photo obscured

TABLE D2-5

HELICOPTER COCKPIT DATA
S-76 - 5 of 9

Helicopter: S-76 Test Date: 6/23/80

Slide Run No.	Slide Event Type			Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
C-58	LFO	300'	140 Kt	8:47:40	490'	142	107%	60%	-100	260
C-59	LFO	500'	140 Kt	8:50:30	540'	140	107%	65%	-200	76
C-60	LFO	500'	140 Kt	8:53:38	540'	140	107%	65%	100	260
C-61	LFO	500'	93 Kt	8:57:51	500'	93	107%	35%	0	77
C-62	LFO	500'	93 Kt	9:00:13	480'	93	107%	45%	0	260
C-63	LFO	500'	93 Kt	9:07:33	530'	93	107%	45%	150	76
C-64	LFO	500'	93 Kt	9:10:29	490'	93	107%	45%	50	260
C-65	LFO	500'	155 Kt	9:14:42	500'	155	107%	75%	-200	80
C-66	LFO	500'	155 Kt	9:16:25	490'	155	107%	80%	0	260
C-67	LFO	500'	155 Kt	9:18:32	500'	155	107%	80%	-300	77
C-68	LFO		155 Kt	9:21:16	XXX	155	XXX	XXX	0	260
B-69	APP			9:26:42	XXX	XXX	107%	15%	-650	260
B-70	APP			9:31:55	250'	XXX	107%	25%	-650	260

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

XXX : photo obscured

TABLE D2-6

HELICOPTER COCKPIT DATA
S-76 - 6 of 9

Helicopter: S-76 Test Date: 6/25/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
A-1	LFO 140 Kt	5:02:42	1020'	140	107%	70%	50	81
A-2	LFO 140 Kt	5:06:22	990'	140	107%	70%	0	260
A-3	LFO 140 Kt	5:08:23	1000'	138	107%	70%	150	76
A-4	LFO 140 Kt	5:10:16	1000'	142	107%	70%	0	260
D-5	LFO 1500'	5:13:55	1580'	142	107%	70%	0	84
D-6	LFO 1500'	5:16:44	1520'	140	107%	65%	0	260
D-7	LFO 1500'	5:18:58	1580'	140	107%	75%	-100	78
D-8	LFO 700'	5:21:02	700'	143	107%	70%	-50	260
D-9	LFO 700'	5:24:11	740'	140	107%	70%	200	80
D-10	LFO 300'	5:26:42	340'	140	107%	70%	-100	260
D-11	LFO 300'	5:28:31	390'	138	107%	70%	50	80
D-12	LFO 1500'	5:31:28	1440'	145	107%	70%	-100	260
D-13	LFO 1500'	5:33:17	1540'	140	107%	75%	-50	79
D-14	LFO 700'	5:36:02	720'	140	107%	65%	-50	260

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D2-7

HELICOPTER COCKPIT DATA
S-76 - 7 of 9

Helicopter: S-76

Test Date: 6/25/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
D-15	LFO 700'	5:38:03	720'	138	107%	70%	100	80
D-16	LFO 300'	5:40:30	300'	140	107%	66%	0	260
D-17	LFO 300'	5:42:19	320'	136	107%	70%	150	84
C-18	LFO 500' 109 Kt	5:46:39	500'	110	107%	45%	50	260
C-19	LFO 500' 109 Kt	5:48:32	500'	109	107%	48%	100	85
C-20	LFO 500' 109 Kt	5:50:37	440'	112	107%	45%	0	260
C-21	LFO 500' 109 Kt	5:53:43	480'	109	107%	45%	0	82
C-22	LFO 500' 109 Kt	5:56:30	476'	12	107	45%	-50	260
C-23	LFO 300' 109 Kt	5:59:15	520'	109	107%	40%	-50	85
C-24	LFO 500' 124 Kt	6:05:52	510'	125	107%	50%	-100	260
C-25	LFO 500' 124 Kt	6:07:03	520'	125	107%	55%	100	72
C-26	LFO 500' 124 Kt	6:10:08	480'	124	107%	50%	-200	260
C-27	LFO 500' 124 Kt	6:13:28	480'	124	107%	55%	50	82
C-28	LFO 500' 124 Kt	6:16:41	480'	125	107%	45%	-100	76

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D2-8

HELICOPTER COCKPIT DATA
S-76 - 8 of 9

Helicopter: S-76 Test Date: 6/25/80

Slide Run No.	Slide Event Type		Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
C-29	LFO 500'	124 Kt	6:18:06	490'	124	107%	50%	100	82
D-30	LFO 2500'		6:23:00	2510'	140	107%	72%	0	262
D-31	LFO 2500'		6:26:58	2480'	144	107%	68%	-100	86
D-32	LFO 2500'		6:29:23	2460'	140	107%	65%	-50	260
D-33	LFO 2500'		6:33:09	2510'	140	107%	70%	50	86
D-34	LFO 2000'		6:39:04	1940'	145	107%	68%	-100	260
D-35	LFO 2000'		6:42:45	1960'	138	107%	78%	150	80
D-36	LFO 2000'		6:46:42	2000'	142	107%	68%	0	260
D-37	LFO 2000'		6:49:10	2010'	142	107%	68%	-100	82
D-38	LFO 1500'		6:53:01	1500'	XXX	XXX	XXX	XXX	XXX
D-39	LFO 2000'		6:56:39	1500'	137	107%	72%	400	80
B-40	APP		7:00:38	240'	70	107%	21%	-600	260
B-41	TO		7:21:55	450'	63	107%	98%	-100	80
B-42	APP		7:26:03	270'	70	107%	31%	-500	76

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots; fpm - feet per minute; IAS - Indicated Airspeed

XXX : photo obscured

TABLE D2-9

HELICOPTER COCKPIT DATA
S-76 - 9 of 9

Helicopter: S-76

Test Date: 6/25/80

Slide Run No.	Slide Event Type		Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
B-43	TO		7:28:15	246'	63	107%	96%	1500	86
B-44	APP		7:32:05	250'	70	107%	31%	-600	260
B-45	TO		7:34:08	240'	70	107%	97%	1500	82
B-46	APP		7:38:33	242'	78	107%	23%	-600	260
B-47	TO		7:41:47	230'	70	107%	100%	1600	82
B-48	APP		7:44:50	240'	70	107%	23%	-600	260
B-49	TO		7:46:20	240'	70	107%	99%	1700	80
B-50	APP		7:50:08	240'	78	107%	25%	-500	260
B-51	TO		7:53:22	241'	70	107%	96%	1700	80
E-52	LFO	140 Kt	7:56:34	1000'	140	107%	71%	100	268
E-53	LFO	140 Kt	7:58:05	960'	142	107%	50%	-50	78
E-54	LFO	140 Kt	7:59:57	1000'	140	107%	66%	-50	270
E-55	LFO	140 Kt	8:02:17	956'	140	107%	69%	-50	78

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D3-1
HELICOPTER COCKPIT DATA
A-109 - 1 of 5

Helicopter: A-109 **Test Date:** 6/24/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
A-1	LFO 1000'	6:11:07	1000'	140	100%	100%	0	90
A-2	LFO 1000'	6:12:50	1000'	130	100%	90%	-175	270
A-3	LFO 1000'	6:14:06	1000'	130	100%	88%	-100	85
A-4	LFO 1000'	6:23:41	980'	130	100%	90%	-50	260
A-5	LFO 1500'	6:26:32	1500'	128	100%	90%	-100	85
A-6	LFO 1500'	6:29:09	1500'	132	100%	95%	0	160
A-7	LFO 700'	6:31:52	720'	128	100%	90%	100	85
A-8	LFO 700'	6:34:15	680'	128	100%	90%	50	260
A-9	LFO 360'	6:36:34	300'	127	100%	85%	-50	90
A-10	LFO 360'	6:38:29	300'	130	100%	90%	0	260
A-11	LFO 1300'	6:41:08	1500'	138	100%	87%	0	88
A-12	LFO 1300'	6:44:23	1480'	142	100%	95%	0	270
A-13	LFO 700'	6:47:08	680'	130	100%	94%	0	88
D-14	LFO 700'	6:50:40	680'	126	100%	86%	100	270

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D3-2

HELICOPTER COCKPIT DATA
A-109 - 2 of 5

Helicopter: A-109

Test Date: 6/24/80

Slide Run No.	Slide Event Type			Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
D-15	LFO	300'		6:52:56	300'	128	100%	80%	-200	90
D-16	LFO	300'		6:54:03	300'	130	100%	90%	50	260
C-17	LFO	500'	130 Kt	6:56:32	510'	130	100%	95%	150	90
C-18	LFO	500'	130 Kt	6:58:48	500'	129	100%	85%	0	270
C-19	LFO	500'	130 Kt	7:02:26	500'	130	100%	90%	0	85
C-20	LFO	500'	130 Kt	7:06:14	500'	130	100%	90%	0	260
C-21	LFO	500'	87 Kt	7:13:37	470'	87	100%	60%	0	85
C-22	LFO	500'	87 Kt	7:16:33	535'	87	100%	60%	0	260
B-23	TO			7:46:58	170'	58	100%	114%	1010	82
B-24	APP			7:49:58	170'	60	100%	40%	-900	260
B-25	TO			7:53:02	150'	60	100%	112%	1000	84
B-26	APP			7:55:36	450'	58	100%	35%	-1000	260
B-27	TO			7:58:17	120'	65	100%	112%	1000	80
B-28	APP			8:01:47	350'	60	100%	35%	-800	260

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D3-3
HELICOPTER COCKPIT DATA
A-109 - 3 of 5

Helicopter: A-109 Test Date: 6/24/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
B-29	TO	8:03:43	110'	60	100%	110%	1000	85
B-30	APP	8:05:22	400'	60	100%	35%	-700	260
B-31	TO	8:07:32	200'	65	100%	115%	1100	85
B-32	APP	8:10:49	380'	60	100%	40%	-700	260
B-33	TO	8:12:52	180'	58	100%	115%	1050	85
B-34	APP	8:14:11	380'	60	100%	38%	-800	260
B-35	TO	8:17:37	140'	63	100%	60%	0	85
B-36	APP	8:18:00	120'	55	100%	35%	-900	260
B-37	TO	8:22:58	150'	60	100%	115%	1010	84
B-38	APP	8:24:22	330'	60	100%	40%	-800	260
B-39	TO	8:26:32	200'	58	100%	112%	1010	82
B-40	APP	8:28:23	330'	60	100%	37%	-1000	260
B-41	TO	8:30:18	160'	60	100%	11%	1000	85
E-42	LFO .9 VNE 1000'	8:32:47	1000'	135	100%	85%	-250	270

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D3-4

HELICOPTER COCKPIT DATA
A-109 - 4 of 5

Helicopter: A-109

Test Date: 6/24/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
E-43	LFO .9 VNE 1000'	8:35:23	980'	130	100%	82%	100	82
E-44	LFO .9 VNE 1000'	8:37:34	970'	125	100%	80%	100	270
E-45	LFO .9 VNE 1000'	8:40:03	1000'	130	100%	90%	0	85
C-46	LFO 500' 87 Kt	8:42:39	460'	87	100%	60%	-75	260
C-47	LFO 500' 87 Kt	8:45:56	500'	90	100%	60%	-150	85
C-48	LFO 500' 145 Kt	8:54:31	420'	142	100%	115%	150	270
C-49	LFO 500' 145 Kt	8:55:48	500'	142	100%	110%	0	89
C-50	LFO 500' 145 Kt	8:58:03	440'	143	100%	110%	-100	270
C-51	LFO 500' 102 Kt	9:00:17	520'	105	100%	70%	0	85
C-52	LFO 500' 102 Kt	9:02:32	460'	105	100%	65%	-100	265
C-53	LFO 500' 102 Kt	9:06:59	500'	105	100%	70%	125	80
C-54	LFO 500' 116 Kt	9:08:16	470'	120	100%	75%	-100	265
C-55	LFO 500' 116 Kt	9:10:28	380'	115	100%	80%	0	80
C-56	LFO 500' 102 Kt	9:12:39	490'	105	100%	65%	-200	270

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D3-5

HELICOPTER COCKPIT DATA
A-109 - 5 of 5

Helicopter: A-109 Test Date: 6/24/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
C-57	LFO 500' 116 Kt	9:15:53	500'	115	100%	80%	50	82
C-58	LFO 500' 116 Kt	9:17:12	470'	110	100%	70%	-100	265
C-59	LFO 500' 145 Kt	9:20:29	450'	143	100%	115%	150	80
C-60	LFO 500' 145 Kt	9:21:39	470'	145	100%	115%	-180	265
C-61	LFO 500' 145 Kt	9:23:40	440'	140	100%	115%	100	260
C-62	LFO 500' 130 Kt	9:25:38	470'	132	100%	115%	0	265
C-63	LFO 500' 130 Kt	9:27:56	500'	130	100%	100%	300	85
C-64	APP	9:30:56	XXX	60	100%	35%	0	265

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots; XXX : photo obscured
fpm - feet per minute; IAS - Indicated Airspeed

TABLE D4-1
HELICOPTER COCKPIT DATA
206L - 1 of 2

Helicopter: 206L

Test Date: 6/26/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
D-1	LFO 300'	5:11:30	340'	115	100%	80%	0	85
D-2	LFO 300'	5:44:69	360'	115	100%	82%	100	260
D-3	LFO 300'	5:47:02	350'	115	100%	86%	0	90
D-4	LFO 300'	5:49:13	360'	115	100%	86%	-150	260
D-5	LFO 700'	XXX	660'	115	100%	XXX	-150	XXX
D-6	LFO 700'	5:55:39	710'	115	100%	88%	0	260
D-7	LFO 700'	5:59:00	700'	115	100%	86%	0	90
D-8	LFO 700'	6:02:45	710'	115	100%	86%	0	260
D-9	LFO 1000'	6:03:14	990'	115	100%	84%	-50	90
D-10	LFO 1000'	6:10:16	960'	115	100%	86%	0	265
D-11	LFO 1000'	6:14:55	980'	115	100%	84%	-200	90
D-12	LFO 1000'	6:18:13	1000'	115	100%	84%	-100	265
D-13	LFO 1500'	6:23:32	1460'	115	100%	84%	-100	90
D-14	LFO 1500'	6:27:50	1490'	115	100%	86%	100	265

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

XXX : photo obscured

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TABLE D4-2

HELICOPTER COCKPIT DATA
206L - 2 of 2

Helicopter: 206L

Test Date: 6/26/80

Slide Run No.	Slide Event Type	Slide Time	Altimeter (Feet)	IAS (Kts)	Rotor Speed (RPM or %)	Torque (%)	Vertical Speed (fpm)	Heading (Degrees)
D-15	LFO 1560'	6:33:10	1420'	115	100%	88%	-100	90
D-16	LFO 1560'	6:36:03	1500'	115	100%	86%	-150	265
D-17	LFO 2000'	8:40:27	2010'	115	100%	84%	0	85
D-18	LFO 2000'	6:45:15	2000'	115	100%	84%	0	260
D-19	LFO 2000'	6:50:41	2000'	115	100%	84%	-150	90
D-20	Hover 300'	6:55:32	300'	XXX	100%	84%	0	265
D-20	Hover 300'	6:56:50	300'	XXX	100%	-156	-150	260

Legend: LFO - Level Flyover; TO - Takeoff; APP - Approach; Kt - Knots;
fpm - feet per minute; IAS - Indicated Airspeed

XXX : photo obscured

APPENDIX E

METEOROLOGICAL DATA

Appendix E

METEOROLOGICAL DATA

This appendix presents a summary of meteorological data gleaned from National Weather Service radiosonde (rawinsonde) weather balloon ascensions. Tables are identified by launch date and launch time. Within each table the following data is provided:

Time	This is the balloon launch time.
Pressure	Atmospheric pressure in inches of Mercury.
Altitude Above Ground Level	Expressed in meters.
Temperature	Expressed in degrees Celsius.
Relative Humidity	Expressed in percent.

These data have been used to establish values of temperature and relative humidity at 33 feet (10m) above ground level for use in atmospheric absorption corrections. Subsequent analyses can use these data to perform layered atmospheric absorption corrections using temperature and relative humidity values for each 100-foot layer between the microphone and the helicopter. The interpolated 100-foot layer data are presented in tabular format.

In addition to the data tables we have also presented graphic displays of temperature, relative humidity, windspeed, crosswind component and headwind components versus altitude for each balloon ascension. The wind vectors are defined for helicopters flying in the 260° direction, (i.e., east to west). Crosswind vectors are identified as either right crosswind (RX) or left crosswind (LX) while along-track vectors are identified as headwind (H) or tailwind (T). The total wind vector is identified as (W). It is noted that point by point summations of crosswind squared and headwind (or tailwind) squared do not always equal the square of the total wind vector due to loss of significant figures in rounding. Nevertheless the plots provide valuable insight into the influence of winds aloft on both helicopter adherence to reference flight paths and helicopter noise levels.

Index to Temperature-Relative Humidity Profiles

Table No.	Test Date	Data
E1	6-22	T, RH
E2	6-23	T, RH
E3	6-24	T, RH
E4	6-25	T, RH
E5	6-26	T, RH

Temperature-Relative Humidity and Wind Vector Plots

Figure	Test Date	Asc. No.	Asc. Time
E1-1	6-22	2	5:35
E1-2	6-22	3	6:11
E1-3	6-22	4	6:30
E1-4	6-22	5	7:00
E1-5	6-22	6	8:00
E1-6	6-22	7	9:00
E2-1	6-23	8	5:00
E2-2	6-23	9	5:30
E2-3	6-23	10	6:00
E2-4	6-23	11	6:30
E2-5	6-23	12	7:00
E2-6	6-23	13	7:30
E2-7	6-23	14	9:00
E3-1	6-24	15	5:00
E3-2	6-24	16	5:30
E3-3	6-24	17	6:00
E3-4	6-24	18	6:30
E3-5	6-24	19	7:00
E3-6	6-24	20	8:00
E3-7	6-24	21	9:00

Figure	Test Date	Asc. No.	Asc. Time
E4-1	6-25	22	5:00
E4-2	6-25	23	5:30
E4-3	6-25	24	6:00
E4-4	6-25	25	6:30
E4-5	6-25	26	7:00
E4-6	6-25	27	8:00
E4-7	6-25	28	9:00
E5-1	6-26	29	5:00
E5-2	6-26	30	5:30
E5-3	6-26	31	6:00
E5-4	6-26	32	6:30
E5-5	6-26	33	7:00
E5-6	6-26	34	8:00
E5-7	6-26	35	9:00

TABLE NO. E1

AIRCRAFT NOISE PROPAGATION

METEOROLOGICAL DATA

(INTERPOLATED)*

(6/22/80)

TIME OF DAY

	5:35		6:11		6:30		7:00		8:00		9:00	
A.P.	30.00		30.00		30.02		30.03		30.03		30.04	
ALT	TEMP	RH	TEMP	RH	TEMP	RH	TEMP	RH	TEMP	RH	TEMP	RH
10	16.3	85.9	14.6	87.1	15.8	86.5	17.1	83.6	20.5	69.0	22.6	63.7
15	16.8	83.7	15.5	86.1	16.0	85.3	17.2	83.9	20.5	67.9	22.5	63.3
45	18.6	73.9	16.5	80.2	16.9	77.8	17.9	85.7	20.2	61.4	21.9	61.4
75	19.5	65.6	17.5	74.4	17.7	70.4	18.7	87.5	20.0	54.8	21.3	59.5
105	19.8	58.2	18.5	68.5	18.5	62.9	19.5	89.3	19.8	48.3	20.7	57.6
135	20.1	51.7	19.3	63.5	19.3	56.2	20.2	90.9	19.5	41.9	20.1	55.7
165	20.5	47.5	19.6	60.5	19.7	52.7	20.4	91.3	19.4	38.6	19.7	54.3
195	21.0	44.9	19.6	58.9	19.7	51.6	20.1	90.7	19.4	38.4	19.6	53.5
225	21.3	43.3	19.6	57.2	19.8	50.6	19.9	90.1	19.4	38.2	19.6	52.6
255	21.1	43.1	19.6	55.6	19.9	49.5	19.7	89.5	19.3	38.0	19.5	51.8
285	20.9	43.1	19.6	54.0	20.0	48.4	19.5	88.8	19.3	37.9	19.4	51.0
315	20.7	43.2	19.6	52.3	20.0	47.4	19.3	88.2	19.3	37.7	19.3	50.7
345	20.5	43.3	19.6	50.7	20.1	46.3	19.1	87.6	19.3	37.5	19.0	50.8
375	20.3	43.3	19.6	49.1	20.2	45.2	18.8	87.0	19.3	37.3	18.8	50.9
405	20.1	43.4	19.6	47.4	20.3	44.2	18.6	86.4	19.2	37.1	18.5	51.1
435	1..9	43.4	19.6	45.8	20.2	43.8	18.4	85.8	19.2	36.9	18.2	51.2
465	19.7	43.5	19.6	44.2	19.9	44.1	18.2	85.2	19.1	37.1	18.0	51.3
495	19.5	43.6	19.6	42.6	19.7	44.5	18.0	84.6	18.8	37.6	17.7	51.4
525	19.3	43.6	19.5	41.7	19.4	45.0	17.8	84.0	18.5	38.2	17.5	51.6
555	19.1	43.7	19.3	42.0	19.1	45.4	17.6	83.3	18.2	38.8	17.2	51.7
585	18.9	43.7	19.0	42.5	18.9	45.9	17.3	82.7	17.9	39.4	16.9	51.8
615	18.7	43.8	18.7	43.1	18.6	46.3	17.1	82.1	17.6	40.0	16.7	52.0
645	18.5	43.9	18.5	43.6	18.4	46.7	16.9	81.5	17.3	40.6	16.4	52.1
675	18.3	43.9	18.2	44.2	18.1	47.2	16.7	80.9	17.0	41.2	16.2	52.2
705	18.0	44.0	17.9	44.7	17.8	47.6	16.5	80.3	16.7	41.8	15.9	52.3
735	17.8	44.0	17.7	45.3	17.6	48.1	16.3	79.7	16.4	42.4	15.6	52.5
765	17.6	44.1	17.4	45.8	17.3	48.5	16.0	79.1	16.1	43.0	15.4	52.6
795	17.4	44.2	17.1	46.4	17.0	48.9	15.8	78.5	15.8	43.7	15.1	52.7
825	17.2	44.2	16.8	46.9	16.8	49.4	15.6	77.8	15.5	44.3	14.9	52.9
855	17.0	44.3	16.6	47.5	16.5	49.8	15.4	77.2	15.2	44.9	14.6	53.0
885	16.8	44.4	16.3	48.0	16.2	50.3	15.2	76.6	14.9	45.5	14.3	53.1
915	16.6	44.4	16.0	48.6	16.0	50.7	15.0	76.0	14.6	46.1	14.1	53.3
945	16.4	44.5	15.8	49.1	15.7	51.2	14.8	75.4	14.3	46.7	13.8	53.4
975	16.1	44.9	15.5	49.7	15.5	51.6	14.5	74.8	14.0	47.3	13.6	53.5
1005	15.9	45.7	15.2	50.2	15.2	52.0	14.3	74.2	13.7	47.9	13.3	53.6
1035	15.6	46.5	15.0	50.8	14.9	52.5	14.1	73.6	13.4	48.5	13.1	53.8
1065	15.3	47.3	14.7	51.3	14.7	52.9	13.9	73.0	13.1	49.1	12.8	53.9
1095	15.0	48.1	14.4	51.9	14.4	53.4	13.7	72.3	12.8	49.7	12.5	54.0
1125	14.7	48.9	14.2	52.4	14.1	53.8	13.5	71.7	12.5	50.3	12.3	54.2
1155	14.5	49.7	13.9	53.0	13.9	54.2	13.2	71.1	12.2	50.9	12.0	54.3
1185	14.2	50.5	13.6	53.5	13.6	54.7	13.0	70.5	11.9	51.5	11.8	54.4
1215	13.9	51.3	13.4	54.1	13.3	55.1	12.8	69.9	11.6	52.1	11.5	54.6
1245	13.6	52.0	13.1	54.6	13.1	55.6	12.6	69.3	11.3	52.7	11.2	54.7
1275	13.3	52.8	12.8	55.2	12.8	56.0	12.4	68.7	11.0	53.3	11.0	54.8
1305	13.1	53.6	12.5	55.7	12.6	56.4	12.2	68.1	10.7	53.9	10.7	54.9
1335	12.8	54.4	12.3	56.3	12.3	56.9	12.0	67.5	10.4	54.5	10.5	55.1
1365	12.5	55.2	12.0	56.8	12.0	57.3	11.7	66.8	10.1	55.1	10.2	55.2
1395	12.2	56.0	11.7	57.4	11.8	57.8	11.5	66.2	9.8	55.7	9.9	55.3
1425	11.9	56.8	11.5	57.9	11.5	58.2	11.3	65.6	9.5	56.3	9.7	55.5
1455	11.6	57.6	11.2	58.5	11.2	58.6	11.1	65.0	9.2	56.9	9.4	55.6
1485	11.4	58.4	10.9	59.0	11.0	59.1	10.9	64.4	8.9	57.5	9.2	55.7
1515	11.1	59.1	10.7	59.6	10.7	59.6	10.7	63.9	8.6	58.1	8.9	55.9
1545	11.0	59.4	10.4	60.4	10.4	60.4	10.4	64.2	8.3	58.7	8.7	56.1
1575			10.1	61.4	10.1	61.5	10.1	65.1	8.1	59.4	8.4	56.4
1605			9.8	62.3	9.8	62.6	9.8	66.1	7.8	60.0	8.2	56.8
1635			9.5	63.2	9.6	63.7	9.5	67.0	7.6	60.6	7.9	57.1
1665			9.3	64.2	9.3	64.8	9.2	67.9	7.4	61.3	7.7	57.5
1695			9.0	65.1	9.0	65.9	9.0	68.8	7.1	61.9	7.4	57.8
1725			8.7	66.0	8.7	67.0	8.7	69.7	6.9	62.5	7.2	58.2
1755			8.4	67.0	8.4	68.1	8.4	70.6	6.6	63.1	6.9	58.5
1785			8.2	67.9	8.1	69.2	8.1	71.5	6.4	63.8	6.7	58.9
1815			7.9	68.8	7.8	70.3	7.8	72.4	6.1	64.4	6.5	59.2
1845			7.6	69.8	7.5	71.4	7.5	73.3	5.9	65.0	6.2	59.5
1875			7.3	70.7	7.2	72.5	7.2	74.2	5.7	65.7	6.0	59.9
1905			7.0	71.6	6.9	73.6	6.9	75.1	5.4	66.3	5.7	60.2

NOTE: Average altitude(ALT): meters
Temperature(TEMP): Deg. Celsius
Relative humidity(RH): %.
Atmosperic Pressure(A.P.): in. Hg

* TEMPERATURE AND HUMIDITY DATA ARE INTERPOLATED TO THE SPECIFIED ALTITUDE

TABLE NO. E2

AIRCRAFT NOISE PROPAGATION

METEOROLOGICAL DATA

(INTERPOLATED)*

(6/23/80)

TIME OF DAY

	5:00		5:30		6:00		6:30		7:00		7:30		9:00	
A.P.	30.06		30.04		30.08		30.08		30.08		30.08		30.10	
ALT	TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH	
10	17.4	79.2	16.9	80.6	16.7	84.6	17.0	83.0	18.5	79.2	21.2	71.7	24.9	61.1
15	18.0	72.3	17.1	79.9	16.9	83.5	17.2	81.8	18.6	78.2	21.3	70.7	24.9	60.9
45	19.9	56.5	18.1	75.9	18.1	76.8	18.3	75.1	19.3	72.5	21.7	65.0	24.8	59.4
75	20.9	49.2	19.2	71.9	19.3	70.2	19.4	68.4	19.9	66.7	22.1	59.2	24.7	58.0
105	20.3	48.7	20.2	67.9	20.5	63.6	20.5	61.7	20.6	61.0	22.4	53.5	24.6	56.5
135	19.8	48.2	21.2	63.8	21.7	56.9	21.6	54.9	21.2	55.3	22.8	47.7	24.5	55.0
165	19.2	47.8	22.0	60.0	22.5	52.4	22.3	50.0	21.7	50.7	23.0	43.5	24.4	53.8
195	18.6	47.3	22.3	56.3	22.6	51.0	22.5	47.7	22.0	48.1	23.0	42.3	24.2	53.3
225	18.0	46.8	22.4	52.7	22.6	50.9	22.5	46.5	22.1	46.4	22.7	42.6	23.9	53.2
255	17.5	46.4	22.6	49.2	22.5	50.8	22.5	45.3	22.3	44.8	22.5	42.9	23.6	53.2
285	16.9	46.7	22.6	47.3	22.5	50.6	22.5	44.1	22.4	43.1	22.2	43.2	23.3	53.2
315	16.2	48.5	22.4	47.3	22.4	50.5	22.5	42.9	22.4	42.4	22.0	43.5	23.0	53.2
345	15.4	51.1	22.1	47.7	22.4	50.4	22.5	41.9	22.1	42.7	21.7	43.8	22.8	53.1
375	14.7	53.7	21.9	48.0	22.3	50.2	22.3	41.6	21.9	43.1	21.5	44.1	22.5	53.1
405	14.3	55.0	21.6	48.3	22.2	50.2	22.1	42.1	21.6	43.4	21.2	44.4	22.2	53.1
435	14.3	55.0	21.4	48.7	22.0	50.5	21.8	42.5	21.3	43.8	21.0	44.7	21.9	53.0
465			21.1	49.0	21.7	50.9	21.5	43.0	21.1	44.2	20.7	45.0	21.6	53.0
495			20.9	49.3	21.5	51.2	21.3	43.5	20.8	44.6	20.5	45.3	21.3	53.0
525			20.6	49.7	21.2	51.6	21.0	43.9	20.5	45.0	20.3	45.6	21.1	52.9
555			20.4	50.0	21.0	52.0	20.7	44.4	20.3	45.4	20.0	45.9	20.8	52.9
585			20.1	50.3	20.7	52.3	20.5	44.9	20.0	45.8	19.8	46.2	20.5	52.9
615			19.9	50.6	20.5	52.7	20.2	45.3	19.7	46.2	19.5	46.4	20.2	52.8
645			19.6	51.0	20.2	53.0	19.9	45.8	19.5	46.6	19.3	46.7	19.9	52.8
675			19.4	51.3	19.9	53.4	19.6	46.3	19.2	47.0	19.0	47.0	19.6	52.8
705			19.2	51.6	19.7	53.8	19.4	46.8	18.9	47.4	18.8	47.3	19.4	52.8
735			18.9	52.0	19.4	54.1	19.1	47.2	18.7	47.8	18.5	47.6	19.1	52.7
765			18.7	52.3	19.2	54.5	18.8	47.7	18.4	48.2	18.3	47.9	18.8	52.7
795			18.4	52.6	18.9	54.9	18.6	48.2	18.1	48.6	18.0	48.2	18.5	52.7
825			18.2	52.9	18.7	55.2	18.3	48.6	17.9	49.0	17.8	48.5	18.2	52.6
855			17.9	53.3	18.4	55.6	18.0	49.1	17.6	49.4	17.5	48.8	17.9	52.6
885			17.7	53.6	18.1	55.9	17.8	49.6	17.3	49.8	17.3	49.1	17.7	52.6
915			17.4	53.9	17.9	56.3	17.5	50.0	17.1	50.2	17.1	49.4	17.4	52.5
945			17.2	54.3	17.6	56.7	17.2	50.5	16.8	50.6	16.8	49.7	17.1	52.5
975			16.9	54.6	17.4	57.0	17.0	51.0	16.5	51.0	16.6	50.0	16.8	52.5
1005			16.7	54.9	17.1	57.4	16.7	51.4	16.3	51.4	16.3	50.3	16.5	52.4
1035			16.4	55.2	16.9	57.7	16.4	51.9	16.0	51.8	16.1	50.6	16.3	52.4
1065			16.2	55.6	16.6	58.1	16.2	52.4	15.7	52.2	15.8	50.9	16.0	52.4
1095			15.9	55.9	16.3	58.5	15.9	52.9	15.5	52.6	15.6	51.2	15.7	52.4
1125			15.7	56.2	16.1	58.8	15.6	53.3	15.2	53.0	15.3	51.5	15.4	52.3
1155			15.5	56.6	15.8	59.2	15.4	53.8	14.9	53.4	15.1	51.8	15.1	52.3
1185			15.2	56.9	15.6	59.5	15.1	54.3	14.7	53.8	14.8	52.1	14.8	52.3
1215			15.0	57.2	15.3	59.9	14.8	54.7	14.4	54.1	14.6	52.4	14.6	52.2
1245			14.7	57.6	15.1	60.3	14.5	55.2	14.1	54.5	14.4	52.7	14.3	52.2
1275			14.5	57.9	14.8	60.6	14.3	55.7	13.9	54.9	14.1	53.0	14.0	52.2
1305			14.2	58.2	14.5	61.0	14.0	56.1	13.6	55.3	13.9	53.3	13.7	52.1
1335			14.0	58.5	14.3	61.4	13.7	56.6	13.3	55.7	13.6	53.6	13.4	52.1
1365			13.7	58.9	14.0	61.7	13.5	57.1	13.1	56.1	13.5	53.7	13.3	52.1
1395			13.5	59.2	13.8	62.1	13.2	57.5	12.8	56.5				
1425			13.2	59.5	13.5	62.4	12.9	58.0	12.5	56.9				
1455			13.0	59.9	13.3	62.8	12.7	58.5	12.3	57.3				
1485			12.7	60.2	13.0	63.2	12.4	59.0	12.0	57.7				
1515			12.5	60.5	12.7	63.5	12.1	59.4	11.7	58.1				
1545			12.2	60.9	12.5	63.8	11.9	59.8	11.5	58.4				
1575			11.9	61.3	12.2	63.9	11.6	59.7	11.2	58.3				
1605			11.6	61.8	12.0	63.7	11.4	59.4	11.0	57.9				
1635			11.3	62.3	11.8	63.5	11.2	59.1	10.8	57.6				
1665			10.9	62.9	11.5	63.3	11.0	58.7	10.6	57.2				
1695			10.6	63.4	11.3	63.2	10.8	58.4	10.4	56.8				
1725			10.3	63.9	11.0	63.0	10.5	58.1	10.1	56.4				
1755			9.9	64.4	10.8	62.8	10.3	57.7	9.9	56.1				
1785			9.6	64.9	10.6	62.6	10.1	57.4	9.7	55.7				
1815			9.3	65.4	10.3	62.4	9.9	57.1	9.5	55.3				
1845			8.9	65.9	10.1	62.3	9.7	56.7	9.3	54.9				
1875			8.6	66.4	9.9	62.1	9.4	56.4	9.0	54.6				
1905			8.3	66.9	9.6	61.9	9.2	56.1	8.8	54.2				

NOTE: Averase altitude(ALT): meters
Temperature(TEMP): Des. Celsius
Relative humiditw(RH): %.
Atmosreric Pressure(A.P.): in. Hs

* TEMPERATURE AND HUMIDITY DATA ARE INTERPOLATED TO THE SPECIFIED ALTITUDE

TABLE NO. E3

AIRCRAFT NOISE PROPAGATION

METEOROLOGICAL DATA

(INTERPOLATED)*

(6/24/80)

TIME OF DAY

	5:00		5:30		6:00		6:30		7:00		8:00		9:00	
A.P.	30.04		30.03		30.04		30.04		30.04		30.06		30.06	
ALT	TEMP	RH	TEMP	RH	TEMP	RH	TEMP	RH	TEMP	RH	TEMP	RH	TEMP	RH
10	18.6	80.3	18.4	83.4	17.3	88.2	19.1	87.3	20.2	83.6	21.8	77.0	24.3	74.6
15	18.7	79.9	18.5	82.9	18.2	87.8	19.2	86.9	20.2	83.4	21.7	77.9	24.2	74.6
45	19.5	77.6	19.0	80.1	18.7	84.9	19.6	84.3	20.3	82.5	21.4	78.5	23.9	74.5
75	20.3	75.3	19.4	77.3	19.3	82.0	20.0	81.7	20.3	81.6	21.0	79.1	23.6	74.5
105	21.1	72.9	19.9	74.4	19.8	79.1	20.4	79.1	20.4	80.7	20.7	79.8	23.2	74.4
135	21.9	70.6	20.3	71.7	20.4	76.2	20.8	76.6	20.5	79.8	20.3	80.4	22.9	74.3
165	22.2	69.2	20.5	70.1	20.7	74.2	21.0	74.6	20.6	78.7	20.3	80.0	22.5	74.1
195	22.1	68.7	20.6	69.6	20.8	73.2	21.2	73.4	20.8	77.3	20.7	78.4	22.2	73.5
225	22.0	68.3	20.6	69.2	20.8	72.3	21.4	72.2	20.9	75.8	21.2	76.5	21.8	72.8
255	21.9	68.0	20.6	68.7	20.9	71.4	21.5	71.1	21.1	74.4	21.7	74.7	21.4	72.2
285	21.8	67.6	20.7	68.2	20.9	70.5	21.7	69.9	21.3	73.0	22.1	72.8	21.4	71.8
315	21.7	67.2	20.7	67.8	21.0	69.6	21.8	68.8	21.5	71.5	22.6	71.0	21.6	71.9
345	21.6	66.8	20.7	67.3	21.0	68.7	21.9	67.6	21.7	70.1	23.1	69.1	22.0	71.9
375	21.5	66.4	20.8	66.9	21.0	67.8	22.1	66.5	21.8	68.6	23.6	67.2	22.3	72.0
405	21.4	66.0	20.8	66.4	21.1	66.9	22.2	65.3	22.0	67.2	24.0	65.4	22.6	72.0
435	21.3	65.5	20.8	66.0	21.1	66.0	22.4	64.2	22.2	65.7	24.5	63.5	22.9	72.1
465	21.2	65.2	20.9	65.5	21.2	65.1	22.5	63.0	22.4	64.3	25.0	61.7	23.2	72.1
495	21.1	64.8	20.9	65.1	21.2	64.2	22.7	61.8	22.6	62.9	25.2	60.7	23.4	72.2
525	21.0	64.4	21.0	64.6	21.3	63.3	22.7	61.2	22.6	62.1	25.0	60.9	23.2	72.4
555	20.9	64.0	21.0	64.2	21.3	62.4	22.6	61.4	22.5	62.1	24.7	61.2	23.0	72.7
585	20.8	63.6	21.0	63.7	21.4	61.5	22.4	61.7	22.4	62.3	24.5	61.4	22.7	72.9
615	20.7	63.2	21.1	63.3	21.2	61.4	22.2	62.0	22.2	62.6	24.2	61.7	22.5	73.1
645	20.5	62.8	21.1	62.8	21.0	61.9	22.0	62.3	22.1	62.8	24.0	62.0	22.2	73.4
675	20.4	62.5	21.1	62.3	20.7	62.5	21.8	62.5	21.9	63.0	23.7	62.3	22.0	73.6
705	20.3	62.1	21.2	61.9	20.5	63.0	21.6	62.8	21.8	63.2	23.5	62.5	21.7	73.8
735	20.2	61.7	21.1	61.7	20.2	63.5	21.4	63.1	21.7	63.5	23.2	62.8	21.5	74.1
765	20.1	61.4	20.9	62.0	20.0	64.0	21.2	63.4	21.5	63.7	22.9	63.1	21.2	74.3
795	19.9	61.7	20.6	62.5	19.7	64.6	21.0	63.7	21.4	63.9	22.7	63.4	20.9	74.5
825	19.7	62.3	20.3	62.9	19.5	65.1	20.9	64.0	21.2	64.2	22.4	63.6	20.7	74.8
855	19.4	62.9	20.0	63.4	19.2	65.6	20.7	64.3	21.1	64.4	22.2	63.9	20.4	75.0
885	19.2	63.5	19.7	63.8	18.9	66.1	20.5	64.6	20.9	64.6	21.9	64.2	20.2	75.2
915	19.0	64.1	19.5	64.3	18.7	66.6	20.3	64.9	20.8	64.9	21.7	64.5	19.9	75.5
945	18.7	64.8	19.2	64.7	18.4	67.2	20.1	65.2	20.6	65.4	21.4	64.9	19.7	75.7
975	18.5	65.4	18.9	65.1	18.2	67.7	19.9	65.5	20.3	66.2	21.1	65.5	19.4	75.9
1005	18.3	66.0	18.6	65.6	17.9	68.2	19.7	65.8	20.0	67.0	20.7	66.4	19.1	76.2
1035	18.0	66.6	18.3	66.0	17.7	68.7	19.5	66.1	19.8	67.9	20.4	67.2	18.9	76.4
1065	17.8	67.2	18.0	66.5	17.4	69.3	19.3	66.6	19.5	68.7	20.0	68.1	18.6	76.6
1095	17.5	67.8	17.8	66.9	17.2	69.8	19.0	67.3	19.2	69.6	19.6	68.9	18.4	76.9
1125	17.3	68.4	17.5	67.4	16.9	70.3	18.7	67.9	18.9	70.5	19.3	69.8	18.1	77.1
1155	17.1	69.1	17.2	67.8	16.7	70.8	18.4	68.5	18.6	71.3	18.9	70.6	17.9	77.3
1185	16.9	70.0	16.9	68.3	16.4	71.4	18.2	69.1	18.4	72.2	18.5	71.5	17.6	77.6
1215	16.7	71.4	16.6	68.7	16.1	71.9	17.9	69.8	18.1	73.0	18.2	72.4	17.4	77.8
1245	16.6	72.9	16.3	69.2	15.9	72.4	17.6	70.4	17.8	73.9	17.8	73.2	17.1	78.0
1275	16.4	74.4	16.1	69.6	15.6	72.9	17.4	71.0	17.5	74.7	17.4	74.1	16.8	78.3
1305	16.3	75.9	15.8	70.1	15.4	73.4	17.1	71.7	17.2	75.6	17.1	74.9	16.6	78.5
1335	16.1	76.6	15.5	70.5	15.1	74.0	16.8	72.3	17.0	76.5	16.7	75.8	16.3	78.7
1365	16.0	74.5	15.2	71.0	14.9	74.5	16.5	72.9	16.7	77.3	16.3	76.6	16.1	79.0
1395	15.8	70.4	14.9	71.4	14.6	75.0	16.3	73.5	16.4	78.2	16.0	77.5	15.8	79.2
1425	15.6	66.2	14.7	71.9	14.4	75.5	16.0	74.2	16.1	79.0	15.6	77.5	15.6	79.4
1455	15.4	62.1	14.4	72.3	14.1	76.1	15.7	74.8	15.8	79.9	15.4	73.4	15.3	79.7
1485	15.3	58.0	14.1	72.8	13.8	76.6	15.4	75.4	15.6	80.7	15.3	65.9	15.0	79.9
1515	15.1	53.8	13.8	73.2	13.6	77.1	15.2	76.0	15.3	81.6	15.2	58.4	14.8	80.1
1545	14.9	50.3	13.6	72.8	13.4	76.5	14.9	76.5	15.0	82.4	15.2	50.9	14.5	80.4
1575	14.7	48.7	13.4	70.2	13.3	73.0	14.4	76.0	14.6	83.1	15.1	45.4	14.3	78.2
1605	14.5	48.3	13.3	66.4	13.3	67.5	13.9	73.8	14.2	83.5	15.2	42.2	14.2	73.6
1635	14.3	47.9	13.2	62.6	13.2	62.1	13.9	65.1	14.0	78.3	15.3	39.3	14.0	69.0
1665	14.0	47.5	13.2	58.9	13.2	56.6	14.2	50.6	14.0	65.9	15.4	36.3	13.9	64.3
1695	13.8	47.1	13.1	55.1	13.2	51.1	14.6	36.9	14.0	51.7	15.5	34.6	13.7	59.6
1725	13.6	46.7	13.0	51.3	13.2	45.7	14.7	30.9	14.1	40.3			13.6	54.9
1755	13.3	46.3	12.9	47.6	13.1	40.2	14.4	31.7	14.1	36.0			13.4	50.3
1785	13.1	45.9	12.8	43.8	13.1	34.8	14.2	32.5	14.1	35.9			13.2	45.6
1815	12.9	45.5	12.7	40.0	13.1	30.4	13.9	33.3	14.1	35.8			13.1	40.9
1845	12.7	45.1	12.6	36.3	12.9	29.5	13.7	34.2	14.1	35.7			12.9	38.3
1875	12.4	44.7	12.5	32.5	12.7	30.8	13.5	35.0	14.1	35.6			12.8	38.1
1905	12.2	44.3	12.3	31.2	12.4	32.1	13.2	35.8	14.1	35.5			12.6	38.2

NOTE: Average altitude(ALT): meters
Temperature(TEMP): Deg. Celsius
Relative humidity(RH): %.
Atmosperic Pressure(A.P.): in. Hg

* TEMPERATURE AND HUMIDITY DATA ARE INTERPOLATED TO THE SPECIFIED ALTITUDE

TABLE NO. E4

AIRCRAFT NOISE PROPAGATION

METEOROLOGICAL DATA

(INTERPOLATED)*

(6/25/80)

TIME OF DAY

	5:00		5:30		6:00		6:30		7:00		8:00		9:00	
A.P.	30.02		30.02		30.04		30.03		30.03		30.04		30.06	
ALT	TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH	
10	19.7	94.2	19.4	89.5	19.0	93.6	19.6	49.0	19.8	87.8	22.4	80.1	24.2	71.9
15	19.8	93.7	19.5	89.2	19.1	93.0	19.6	50.2	19.7	87.3	22.3	80.3	24.1	72.1
45	19.9	91.0	19.7	87.9	19.5	91.1	20.1	57.3	19.3	85.1	21.4	81.7	23.4	73.6
75	20.1	88.3	19.9	86.5	19.9	89.3	20.5	64.4	19.6	84.2	20.6	82.6	22.7	75.0
105	20.2	85.5	20.1	85.2	20.3	87.5	21.0	71.5	20.2	84.2	20.3	81.7	22.0	76.4
135	20.3	82.8	20.4	84.0	20.7	85.6	21.4	78.5	20.9	84.0	20.3	79.5	21.3	77.9
165	20.5	80.3	20.9	83.5	21.1	82.2	21.9	80.1	21.4	82.2	20.5	77.0	20.9	78.1
195	20.6	77.9	21.8	83.6	21.5	77.1	22.4	76.5	21.8	78.9	20.8	74.1	20.8	76.7
225	20.7	75.6	22.3	82.6	21.9	71.9	22.9	73.0	22.2	75.6	21.2	71.2	20.9	75.0
255	20.8	73.2	22.4	80.3	22.3	67.2	23.2	70.3	22.5	72.2	21.5	69.0	20.9	73.3
285	20.9	70.8	22.5	77.8	22.4	65.1	23.2	69.4	22.7	70.2	21.5	68.1	20.9	71.6
315	21.0	68.4	22.6	75.3	22.2	65.4	22.9	69.3	22.5	69.8	21.3	68.0	20.9	69.9
345	21.1	66.3	22.5	73.7	22.0	65.6	22.7	69.3	22.3	69.8	21.1	68.0	21.0	68.2
375	21.1	65.4	22.3	73.3	21.8	65.8	22.5	69.2	22.1	69.9	21.0	67.9	21.0	66.5
405	20.9	65.7	22.0	72.9	21.6	66.0	22.2	69.1	21.9	69.9	20.8	67.8	21.0	65.6
435	20.8	66.1	21.8	72.5	21.4	66.2	22.0	69.0	21.7	69.9	20.7	67.7	20.9	65.7
465	20.6	66.4	21.6	72.0	21.2	66.5	21.8	69.0	21.4	69.9	20.5	67.6	20.7	65.8
495	20.4	66.7	21.3	71.6	21.0	66.7	21.5	68.9	21.2	69.9	20.4	67.5	20.6	66.0
525	20.3	67.1	21.1	71.2	20.8	66.9	21.3	68.8	21.0	70.0	20.2	67.5	20.5	66.1
555	20.1	67.4	20.9	70.8	20.6	67.1	21.0	68.7	20.8	70.0	20.1	67.4	20.4	66.3
585	20.0	67.7	20.6	70.4	20.4	67.3	20.8	68.6	20.6	70.0	19.9	67.3	20.3	66.4
615	19.8	68.1	20.4	69.9	20.2	67.6	20.6	68.6	20.3	70.0	19.8	67.2	20.2	66.5
645	19.6	68.4	20.2	69.5	20.1	67.8	20.3	68.5	20.1	70.0	19.6	67.1	20.1	66.7
675	19.4	66.4	20.0	69.1	19.9	68.0	20.1	68.4	19.9	70.1	19.5	67.0	20.0	66.8
705	19.1	60.9	19.7	68.7	19.7	68.0	19.9	67.9	19.7	70.1	19.3	67.0	20.0	66.0
735	18.8	53.9	19.5	68.3	19.6	66.8	19.9	64.7	19.6	67.9	19.2	66.6	20.1	61.8
765	18.5	47.9	19.3	67.9	19.5	64.4	20.0	59.4	19.6	61.9	19.3	66.1	20.3	55.0
795	18.3	45.4	19.0	67.4	19.5	62.1	20.1	54.0	19.7	54.5	19.3	65.5	20.5	49.3
825	18.2	45.4	18.9	65.7	19.4	59.7	20.2	49.1	19.8	48.0	19.3	64.9	20.4	47.5
855	18.0	45.4	19.0	62.7	19.4	57.3	20.2	47.0	19.7	45.6	19.4	64.2	20.2	48.5
885	17.9	45.4	19.0	59.6	19.3	55.0	19.9	47.2	19.5	46.6	19.3	63.6	20.0	49.5
915	17.8	45.3	19.0	56.4	19.3	52.6	19.7	47.3	19.3	47.5	19.1	63.1	19.8	50.5
945	17.6	45.3	19.1	53.3	19.2	50.2	19.5	47.5	19.1	48.5	18.9	62.5	19.6	51.5
975	17.5	45.3	19.1	50.6	19.1	48.7	19.3	47.7	18.9	49.5	18.7	61.9	19.4	52.5
1005	17.4	45.3	18.9	49.4	18.9	48.1	19.1	47.8	18.7	50.4	18.5	61.3	19.2	53.5
1035	17.2	45.3	18.7	49.2	18.7	47.9	18.8	48.0	18.5	51.4	18.3	60.7	19.0	54.5
1065	17.1	45.3	18.5	49.0	18.5	47.6	18.6	48.2	18.2	52.4	18.1	60.2	18.8	55.5
1095	17.0	45.3	18.3	48.9	18.3	47.3	18.4	48.3	18.0	53.4	17.8	59.6	18.5	56.5
1125	16.8	45.3	18.1	48.7	18.1	47.0	18.2	48.5	17.8	54.3	17.6	59.0	18.3	57.5
1155	16.7	45.2	17.9	48.5	17.9	46.8	18.0	48.6	17.6	55.3	17.4	58.4	18.1	58.5
1185	16.6	45.2	17.7	48.4	17.7	46.5	17.8	48.8	17.4	56.3	17.2	57.8	17.9	59.5
1215	16.4	45.2	17.5	48.2	17.5	46.2	17.5	49.0	17.2	57.3	17.0	57.3	17.7	60.5
1245	16.3	45.2	17.3	48.0	17.2	45.9	17.3	49.1	16.9	58.2	16.8	56.7	17.5	60.4
1275	16.2	45.2	17.1	47.9	17.0	45.6	17.1	49.3	16.7	59.2	16.6	56.1	17.3	59.4
1305	16.0	45.2	16.9	47.7	16.8	45.4	16.9	49.5	16.5	60.2	16.4	55.5	17.1	58.3
1335	15.9	45.2	16.6	47.6	16.6	45.1	16.7	49.6	16.3	59.8	16.2	54.9	16.9	57.2
1365	15.8	45.2	16.4	47.4	16.4	44.8	16.4	49.8	16.2	58.1	16.0	54.3	16.7	56.2
1395	15.6	45.2	16.2	47.2	16.2	44.5	16.2	50.0	16.0	56.3	15.8	53.8	16.5	55.1
1425	15.5	45.1	16.0	47.1	16.0	44.3	16.0	50.1	15.8	54.6	15.6	53.2	16.3	54.1
1455	15.4	45.1	15.8	46.9	15.8	44.0	15.8	50.3	15.7	52.8	15.3	52.6	16.1	53.0
1485	15.2	45.1	15.6	46.7	15.6	43.7	15.6	50.5	15.5	51.0	15.1	52.0	15.9	51.9
1515	15.1	45.1	15.4	46.6	15.3	43.4	15.3	50.6	15.4	49.3	14.9	51.4	15.7	50.9
1545	15.0	44.5	15.2	46.5	15.1	43.4	15.1	50.7	15.2	47.9	14.7	51.0	15.5	50.0
1575	14.8	42.9	15.0	46.5	14.9	44.0	14.9	50.4	15.0	47.5	14.5	50.9	15.2	50.1
1605	14.6	41.2	14.8	46.6	14.7	45.0	14.6	50.0	14.7	47.6	14.2	51.0	15.0	51.1
1635	14.5	39.5	14.6	46.8	14.5	46.0	14.4	49.6	14.5	47.7	14.0	51.1	14.8	52.0
1665	14.3	37.7	14.4	46.9	14.3	47.1	14.1	49.2	14.3	47.8	13.7	51.2	14.6	52.9
1695	14.2	36.0	14.2	47.0	14.0	48.1	13.9	48.8	14.0	47.9	13.5	51.3	14.3	53.8
1725	14.0	35.1	14.0	47.1	13.8	49.1	13.6	48.4	13.8	47.9	13.2	51.4	14.1	54.7
1755	13.7	36.5	13.7	47.2	13.6	48.6	13.3	48.6	13.5	48.0	12.9	51.5	13.9	55.7
1785	13.4	39.3	13.5	48.0	13.5	46.3	13.0	50.6	13.3	48.1	12.7	51.6	13.6	56.6
1815	13.1	42.1	13.2	49.7	13.3	44.0	12.7	54.0	13.0	48.2	12.4	51.7	13.4	57.5
1845	12.8	44.9	13.0	51.5	13.2	41.6	12.3	57.4	12.8	48.2	12.2	52.8	13.2	58.4
1875	12.5	47.8	12.7	53.3	13.0	39.3	12.0	60.8	12.6	49.2	12.0	55.0	12.9	59.3
1905	12.2	50.6	12.4	55.1	12.9	37.0	11.7	64.2	12.3	51.2	11.7	57.1	12.7	60.2

NOTE1/Averase altitude(ALT): meters
Temrerature(TEMP): Des. Celsius
Relative humiditu(RH): %.
Atmosreric Pressure(A.P.): in. Hs

* TEMPERATURE AND HUMIDITY DATA ARE INTERPOLATED TO THE SPECIFIED ALTITUDE

BEST DOCUMENT AVAILABLE

TABLE NO. E5

AIRCRAFT NOISE PROPAGATION

METEOROLOGICAL DATA

(INTERPOLATED)*

(6/26/80)

TIME OF DAY

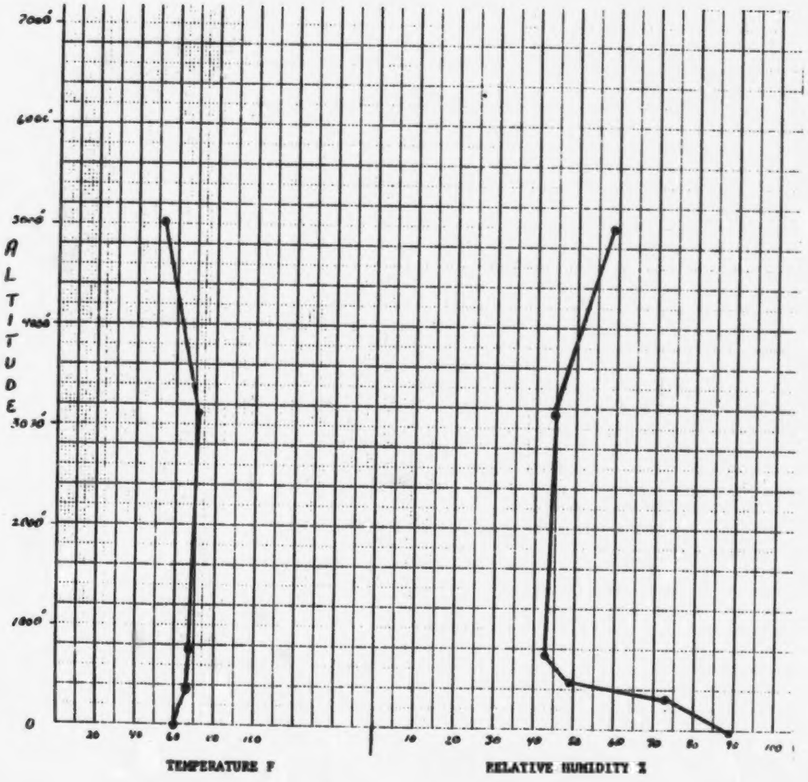
	5:00		5:30		6:30		7:00		8:00		9:00	
A.P.	29.94		29.94		29.93		29.93		29.93		29.94	
ALT	TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH		TEMP&RH	
10	17.8	94.8	18.5	94.4	19.1	92.5	20.1	89.8	20.9	89.6	22.4	86.8
15	17.9	94.4	18.6	94.1	19.2	92.2	20.1	89.6	20.9	89.4	22.4	89.2
45	18.3	91.7	18.9	92.0	19.3	91.0	19.8	88.9	20.3	88.2	21.8	88.3
75	18.7	89.1	19.2	90.0	19.5	89.8	19.5	88.2	19.7	87.1	21.1	87.5
105	19.2	86.4	19.5	87.9	19.6	88.6	19.2	87.5	19.1	85.9	20.5	86.6
135	19.5	84.5	19.7	86.7	19.7	88.0	19.3	87.0	18.7	85.3	19.9	86.4
165	19.7	83.4	19.6	86.5	19.6	88.0	19.7	86.7	18.6	85.2	19.2	86.8
195	20.0	82.4	19.6	86.3	19.5	88.1	19.8	86.5	18.4	85.1	18.8	87.0
225	20.0	82.0	19.5	86.1	19.5	88.1	19.6	86.4	18.3	85.0	18.7	86.9
255	19.7	82.3	19.5	85.9	19.4	88.1	19.4	86.2	18.1	84.9	18.7	86.8
285	19.4	82.6	19.5	85.7	19.4	88.1	19.2	86.0	18.0	84.8	18.6	86.6
315	19.1	82.9	19.4	85.4	19.3	88.2	19.0	85.9	17.8	84.7	18.6	86.5
345	18.8	83.2	19.4	85.2	19.2	88.2	18.8	85.7	17.6	84.6	18.5	86.3
375	18.6	83.4	19.3	85.0	19.1	88.1	18.6	85.5	17.5	84.5	18.5	86.2
405	18.3	83.7	19.2	84.9	18.9	88.0	18.4	85.4	17.3	84.4	18.5	86.1
435	18.0	84.0	18.9	85.0	18.7	87.9	18.2	85.2	17.2	84.3	18.4	85.4
465	17.7	84.3	18.7	85.0	18.5	87.8	18.0	85.0	17.0	84.2	18.3	83.5
495	17.4	84.6	18.4	85.1	18.2	87.7	17.8	84.9	16.9	84.1	18.2	80.9
525	17.2	84.8	18.2	85.1	18.0	87.5	17.6	84.7	16.7	83.6	18.0	78.2
555	16.9	85.1	17.9	85.2	17.8	87.4	17.4	84.5	16.5	81.5	17.9	75.5
585	16.6	85.4	17.7	85.2	17.6	87.3	17.2	84.4	16.2	78.4	17.8	72.9
615	16.3	85.6	17.4	85.3	17.4	87.2	17.0	84.2	16.0	77.5	17.6	70.2
645	16.1	85.7	17.1	85.3	17.1	87.1	16.8	84.0	15.9	79.0	17.5	67.6
675	15.9	85.7	16.9	85.4	16.9	86.9	16.6	83.9	15.7	80.7	17.4	64.9
705	15.7	85.6	16.6	85.4	16.7	86.8	16.4	83.7	15.6	82.5	17.2	62.3
735	15.5	85.6	16.4	85.5	16.5	86.7	16.2	83.5	15.4	83.3	17.1	59.6
765	15.3	85.6	16.1	85.5	16.3	86.6	16.0	83.4	15.2	83.2	17.0	56.9
795	15.1	85.6	15.9	85.6	16.0	86.5	15.8	83.2	14.9	83.0	16.9	54.3
825	14.9	85.5	15.6	85.6	15.8	86.3	15.6	83.0	14.7	82.9	16.7	51.6
855	14.7	85.5	15.4	85.7	15.6	86.2	15.4	82.9	14.5	82.7	16.6	49.0
885	14.5	85.5	15.1	85.7	15.4	86.1	15.2	82.7	14.3	82.5	16.5	46.3
915	14.3	85.5	14.8	85.8	15.2	86.0	15.0	82.5	14.1	82.4	16.3	43.7
945	14.1	85.4	14.6	85.8	14.9	85.9	14.8	82.4	13.8	82.2	16.2	41.0
975	13.9	85.4	14.3	85.9	14.7	85.7	14.6	82.2	13.6	82.1	16.1	39.2
1005	13.7	85.4	14.1	85.9	14.5	85.6	14.6	82.2	13.5	82.0	16.1	38.8
1035	13.5	85.4	13.8	86.0	14.3	85.5			13.5	82.0	16.1	38.8
1065	13.3	85.4	13.6	86.0								
1095	13.1	85.3	13.6	86.0								
1125	12.9	84.8										
1155	12.8	82.6										
1185	12.7	78.0										
1215	13.2	68.5										
1245	13.9	55.3										
1275	14.7	42.1										
1305	15.4	28.9										
1335	16.1	16.2										
1365	16.4	10.0										
1395	16.1	9.9										
1425	15.9	9.9										
1455	15.7	9.8										
1485	15.5	9.7										
1515	15.2	9.7										
1545	15.0	9.6										
1575	14.7	9.5										
1605	14.4	9.5										
1635	14.2	9.4										
1665	13.9	9.3										
1695	13.7	9.2										
1725	13.4	9.2										
1755	13.1	9.1										
1785	12.9	9.0										
1815	12.6	9.0										
1845	12.3	7.8										
1875	12.0	4.9										
1905	11.7	1.6										

NOTE: Average altitude(ALT): meters
Temperature(TEMP): Deg. Celsius
Relative humidity(RH): %.
Atmosperic Pressure(A.P.): in. Hg

* TEMPERATURE AND HUMIDITY DATA ARE INTERPOLATED TO THE SPECIFIED ALTITUDE

FIGURE E1-1

DATE 6/2- 80
ASC. NO. 2
LAUNCH TIME 5:35 AM



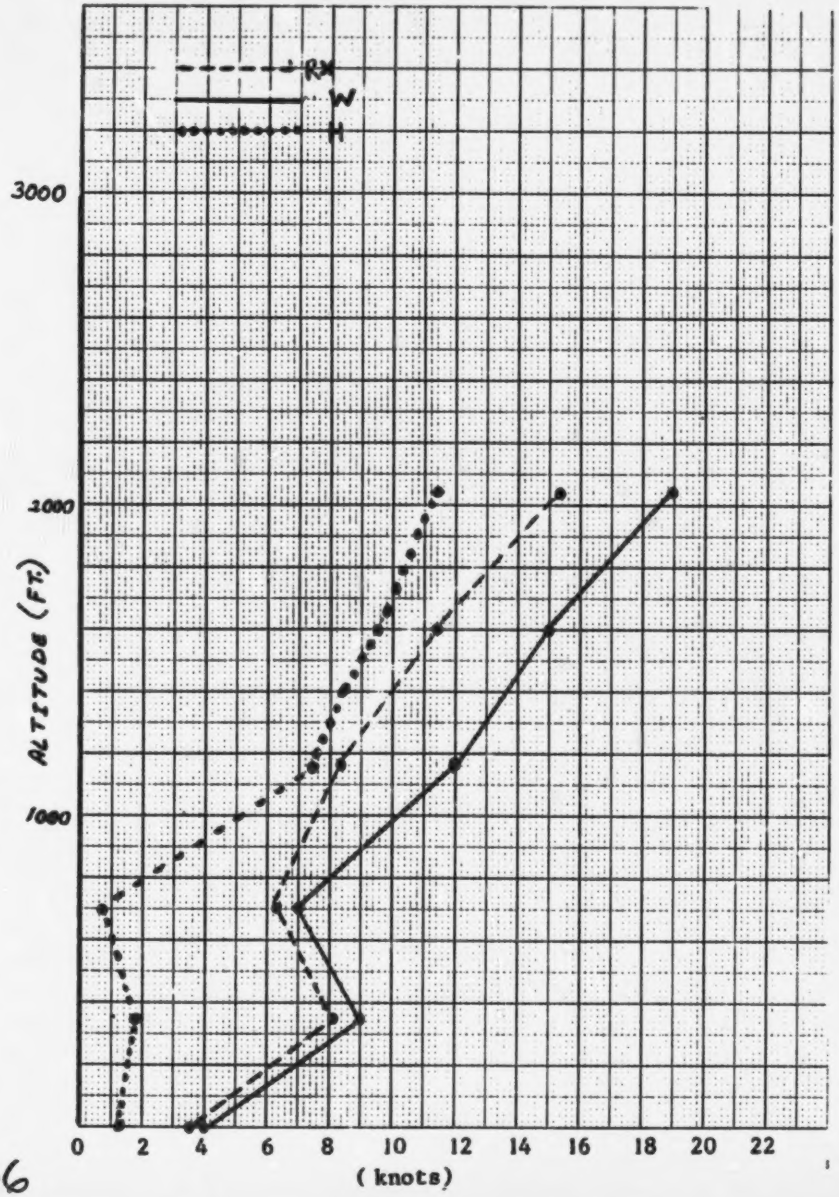


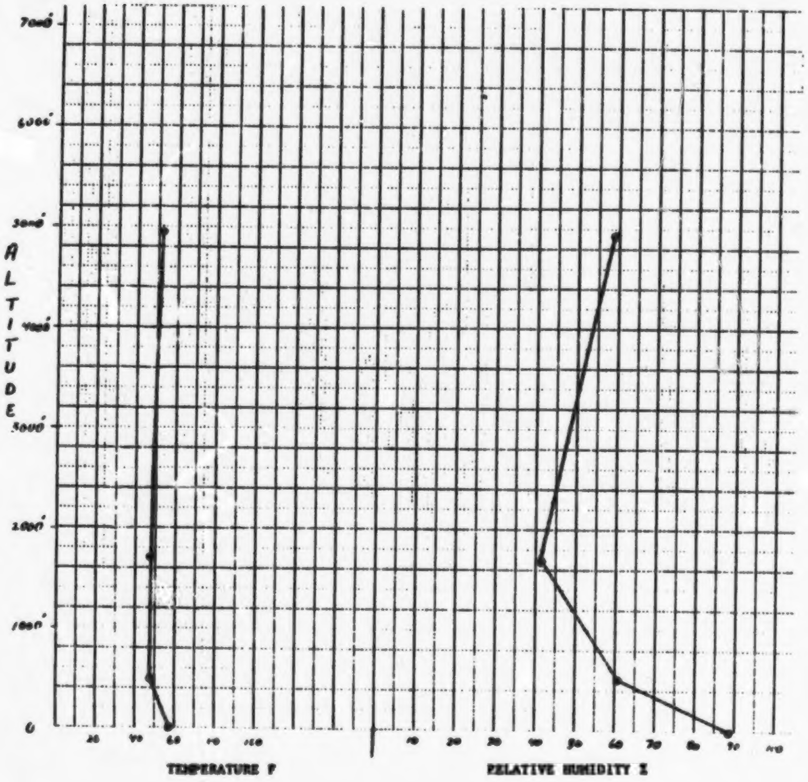
FIGURE E1-2

BEST DOCUMENT AVAILABLE

DATE 6/22/30

ASC. NO. 3

LAUNCH TIME 6:11 AM



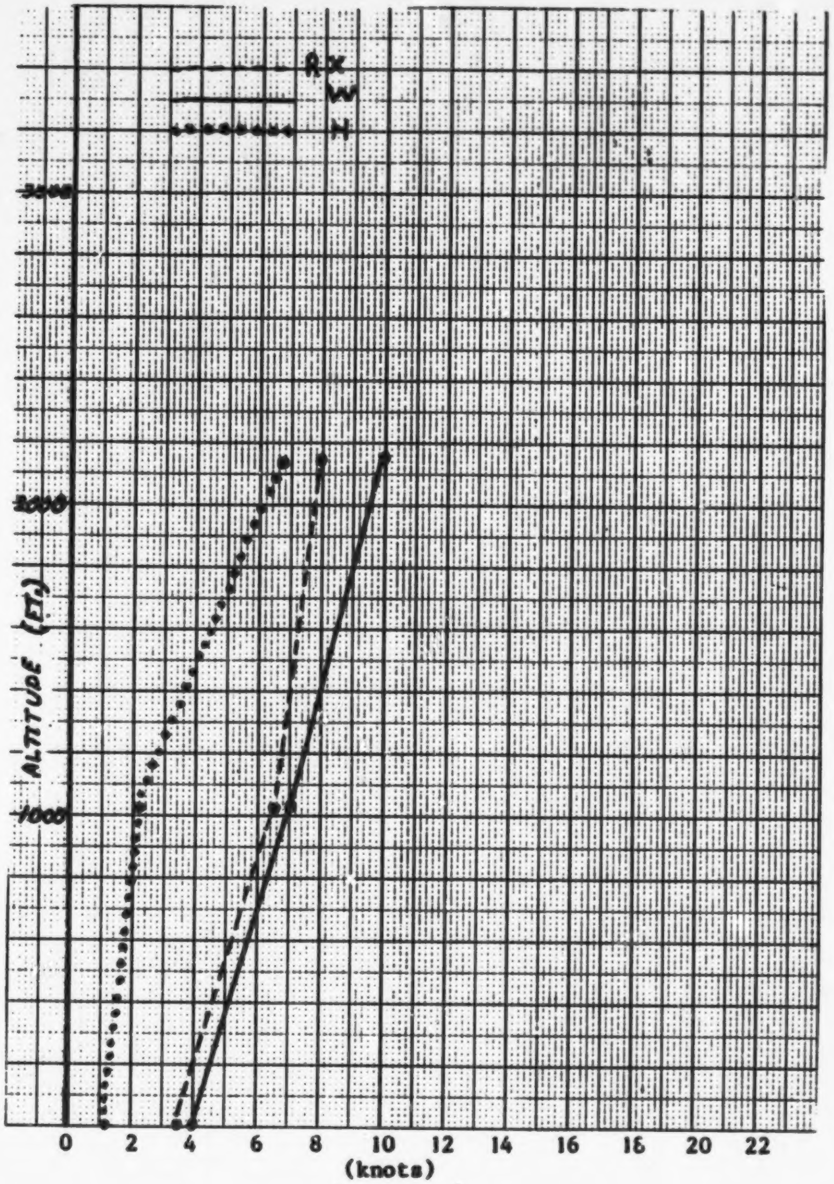
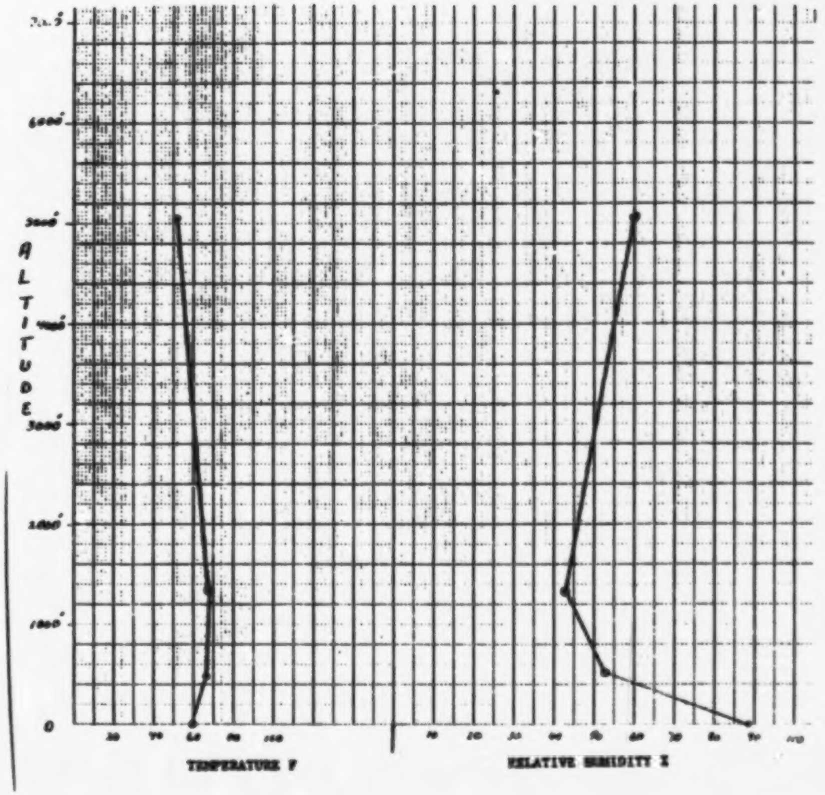


FIGURE E1-3

DATE 6/22/80
ASC. NO. 4
LAUNCH TIME 6:30 AM



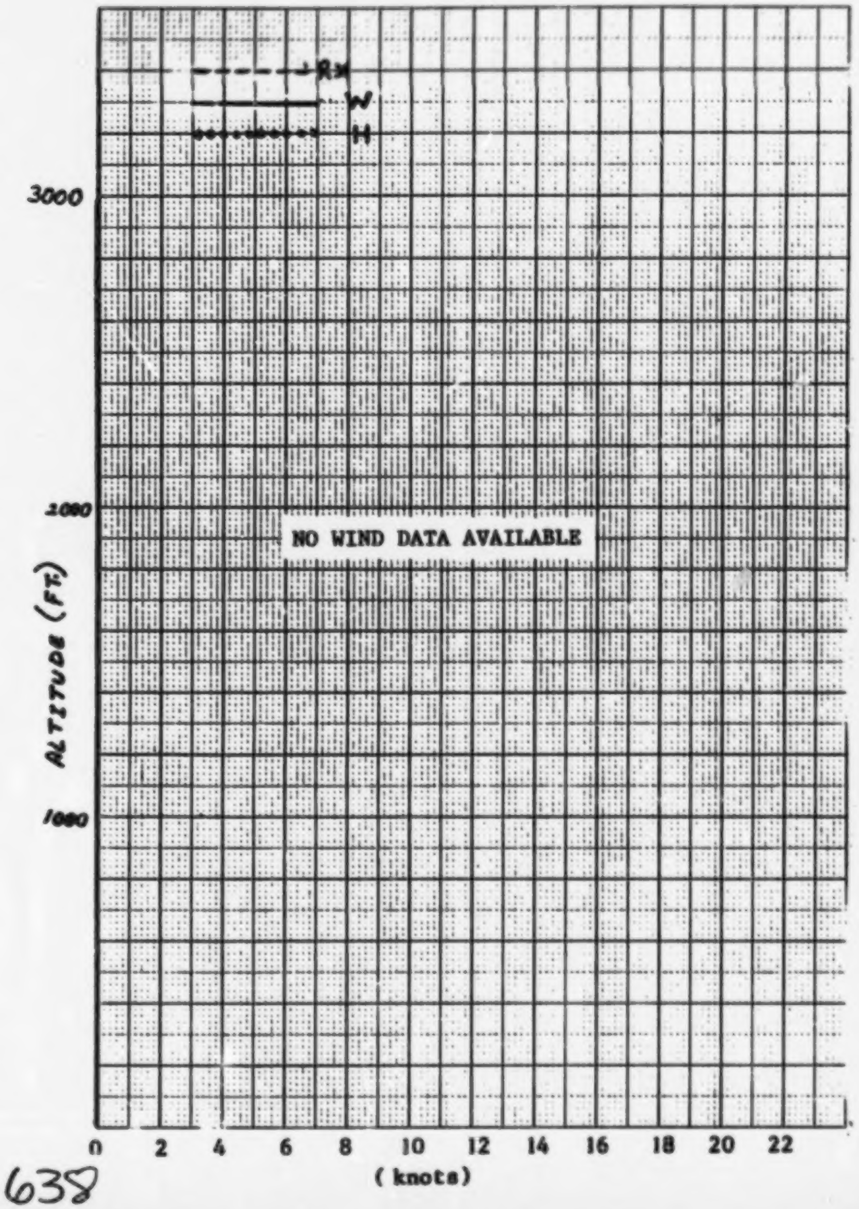
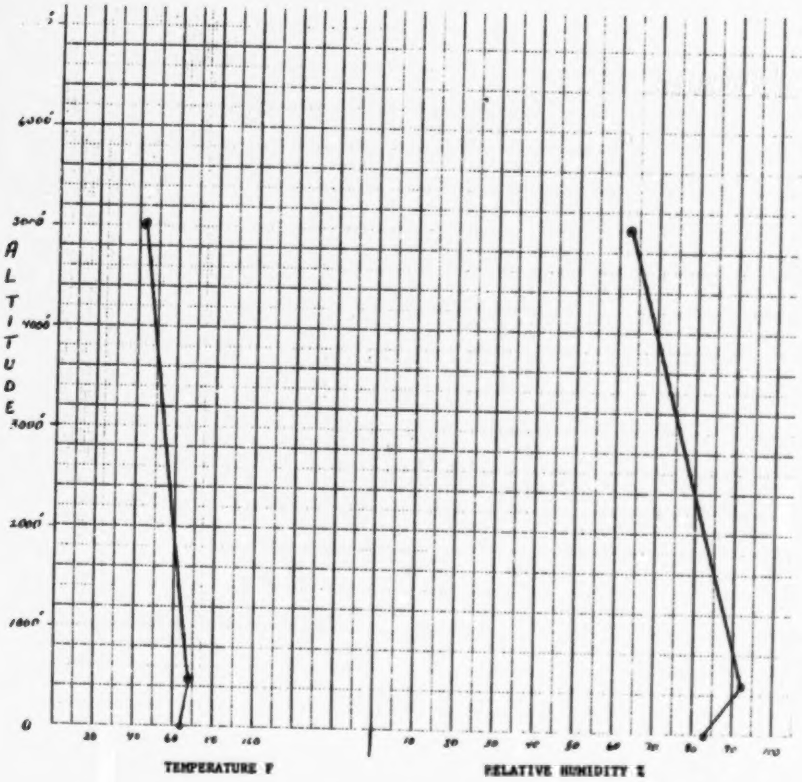


FIGURE E1-4

BEST DOCUMENT AVAILABLE

DATE 6/2- 80
ASC. NO. 5
LAUNCH TIME [illegible] AM



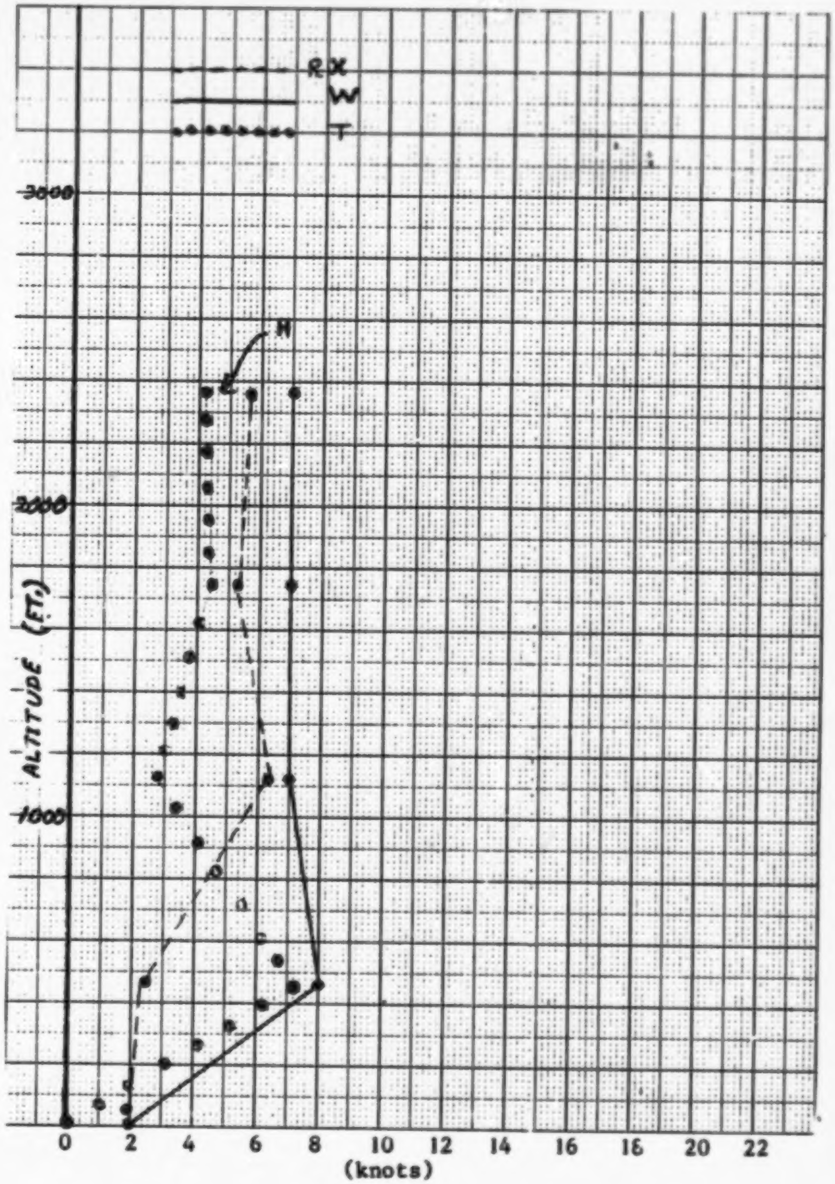


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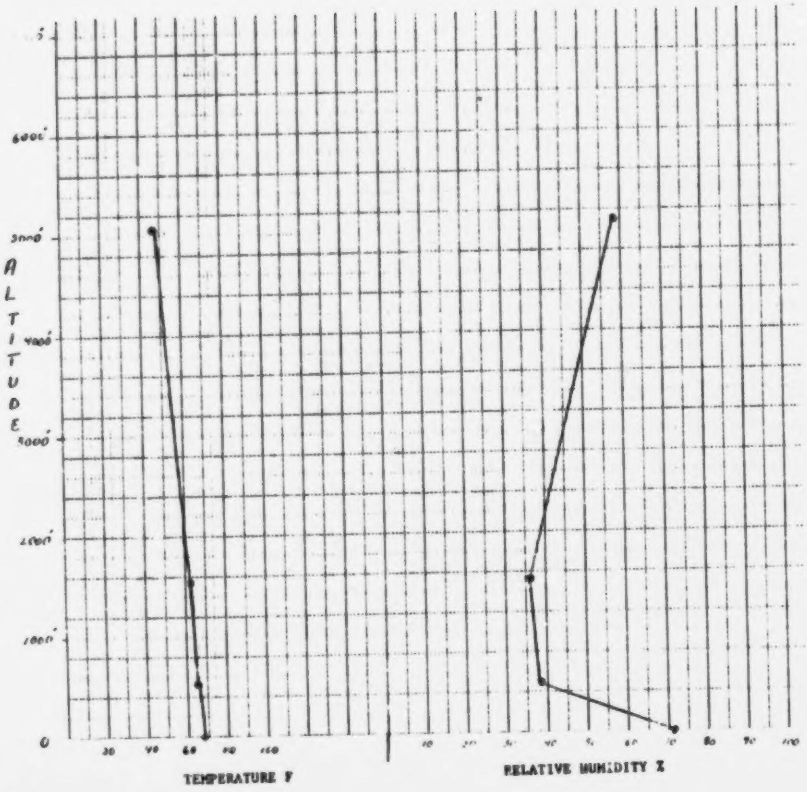
FIGURE E1-5

DATE 6 22 80

ASC. NO. 6

LAUNCH TIME 8:00 AM



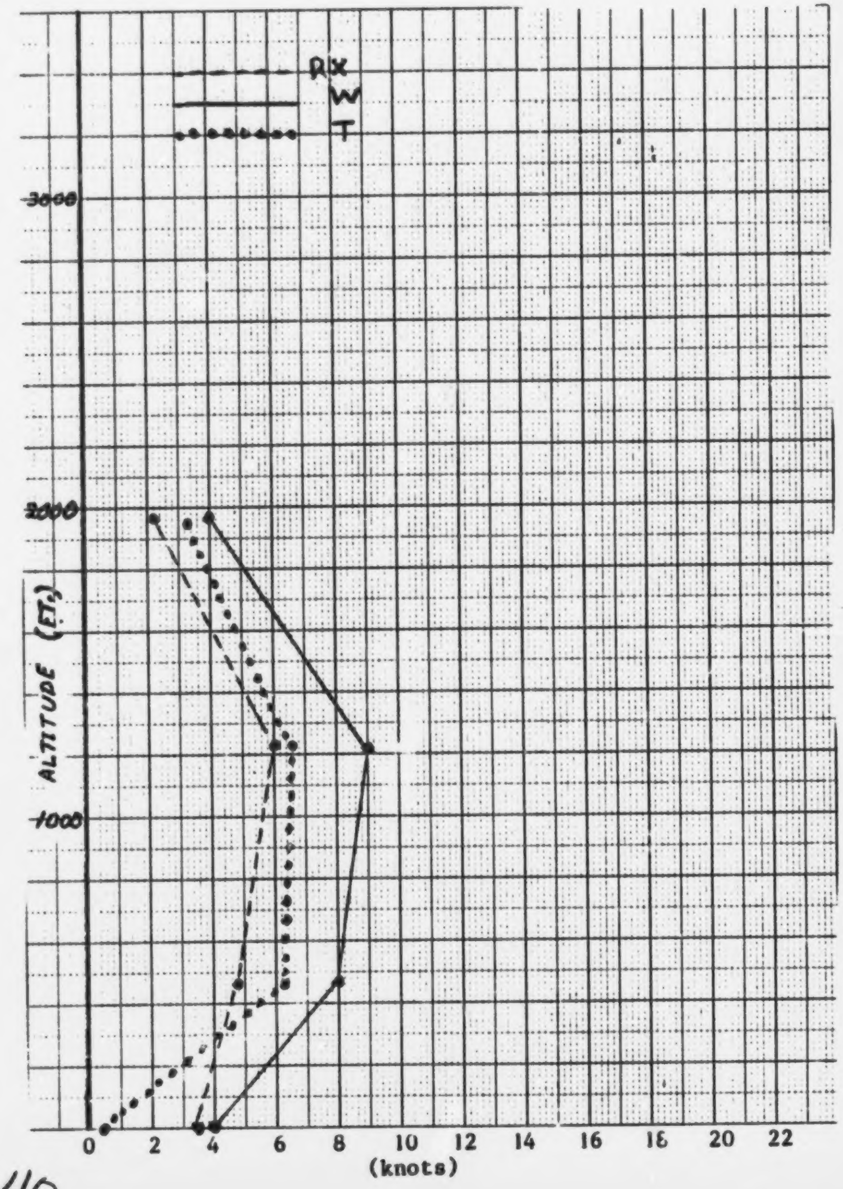
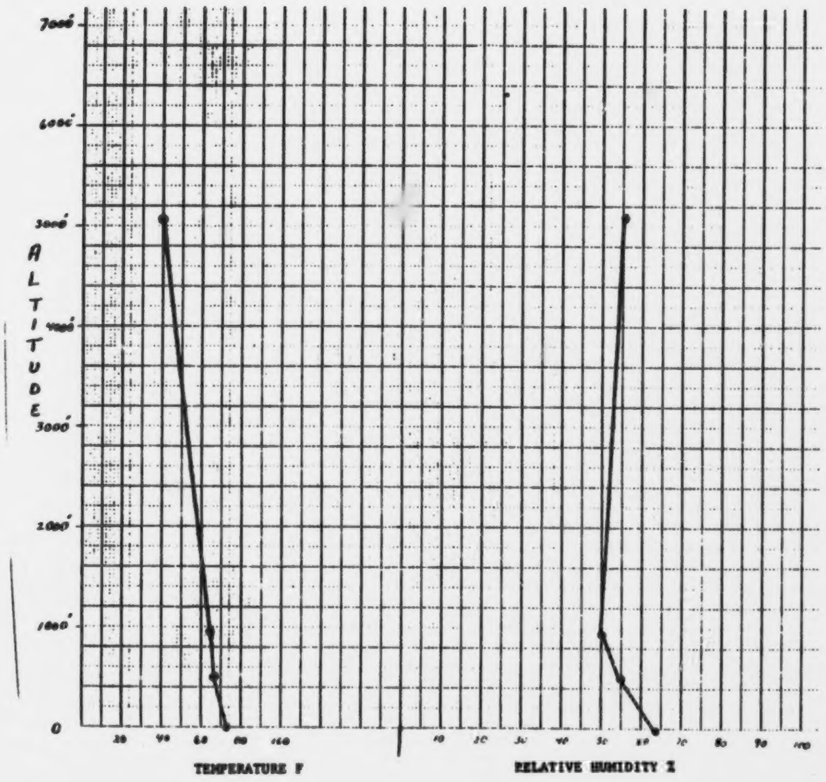


FIGURE E1-6

BEST DOCUMENT AVAILABLE

DATE 6/22/80
ASC. NO. 7
LAUNCH TIME 7:00 AM



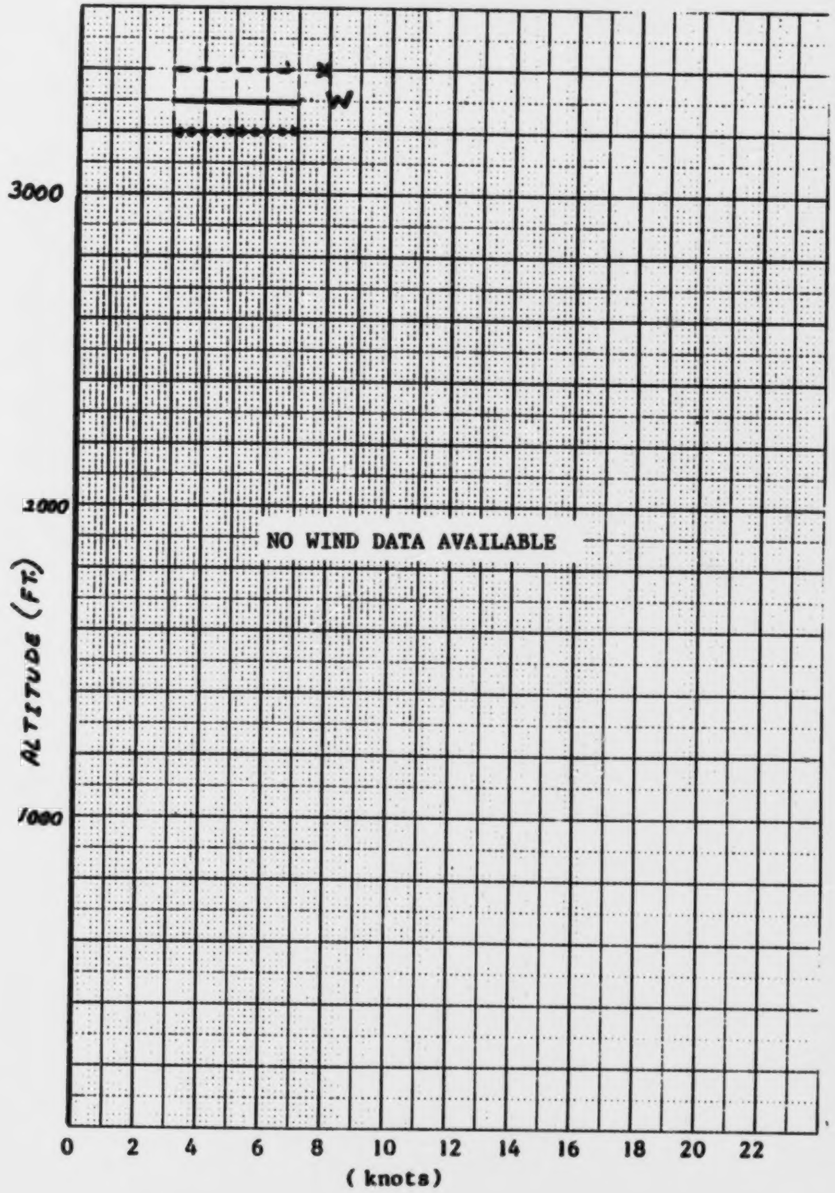
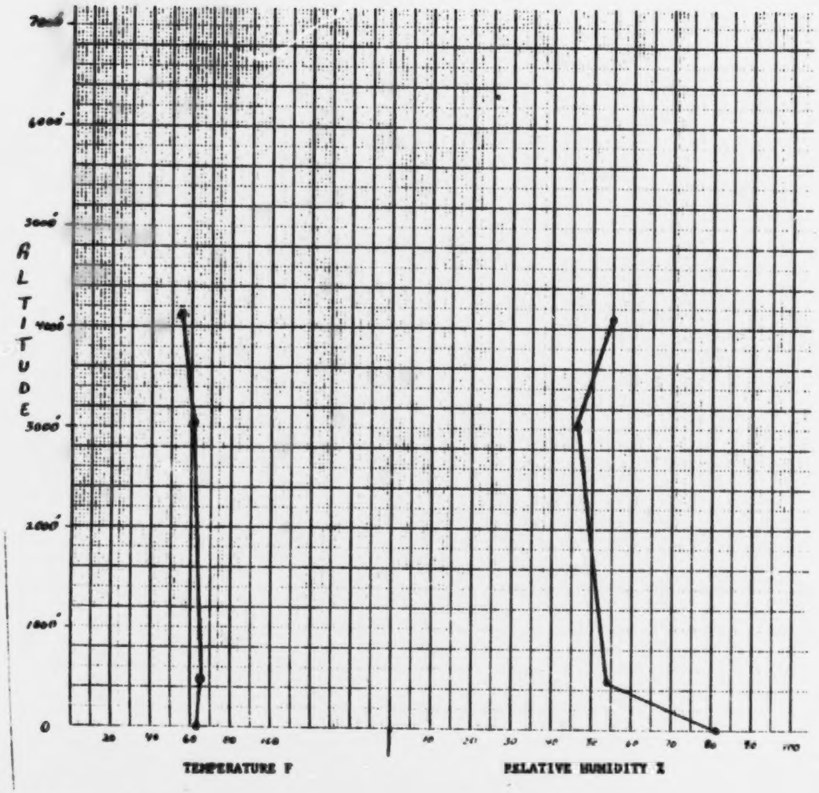


FIGURE E2-1

DATE 6/23/80
ASC. NO. 8
LAUNCH TIME 5:00 AM



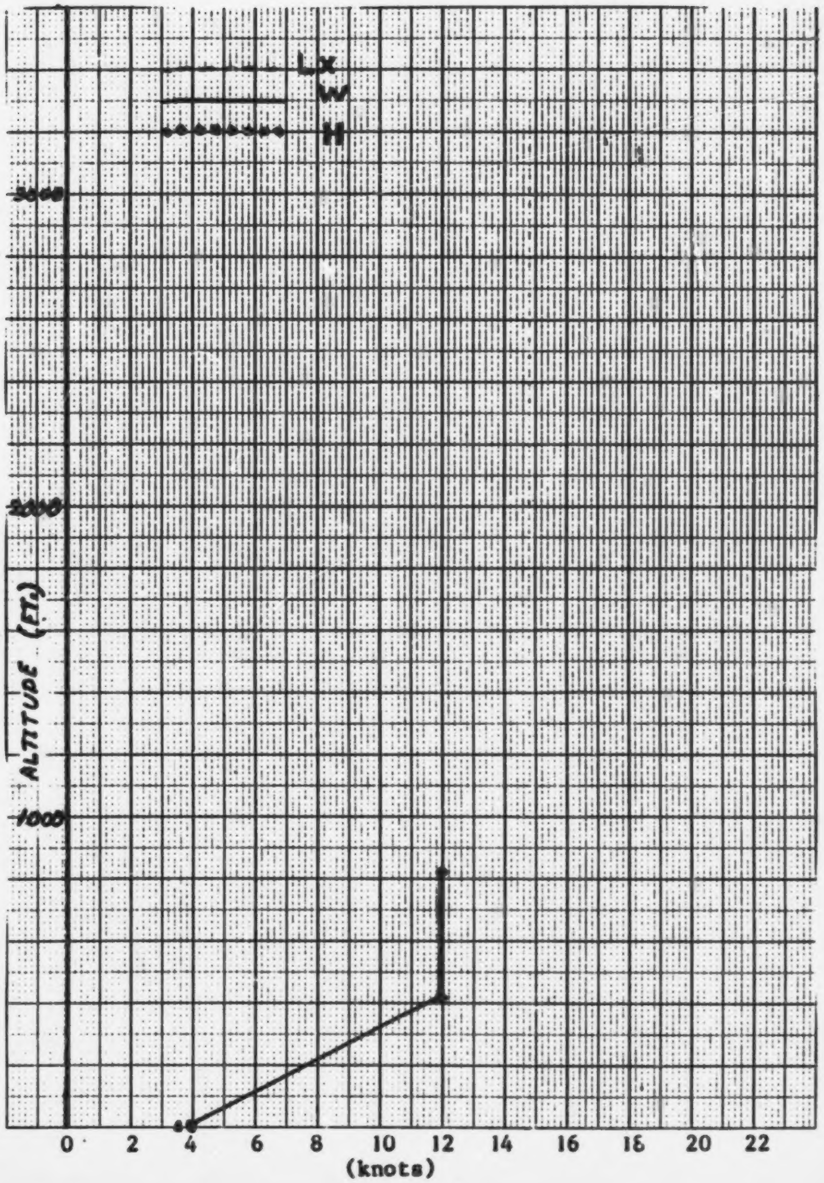


FIGURE E2-2

BEST DOCUMENT AVAILABLE

DATE 6/2 3
ASC. NO. 1
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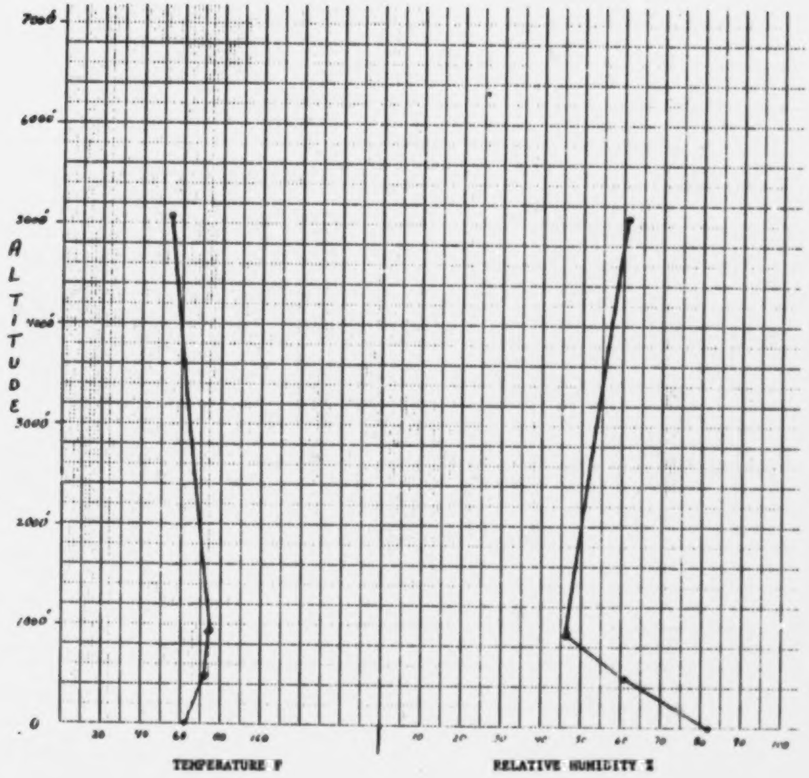


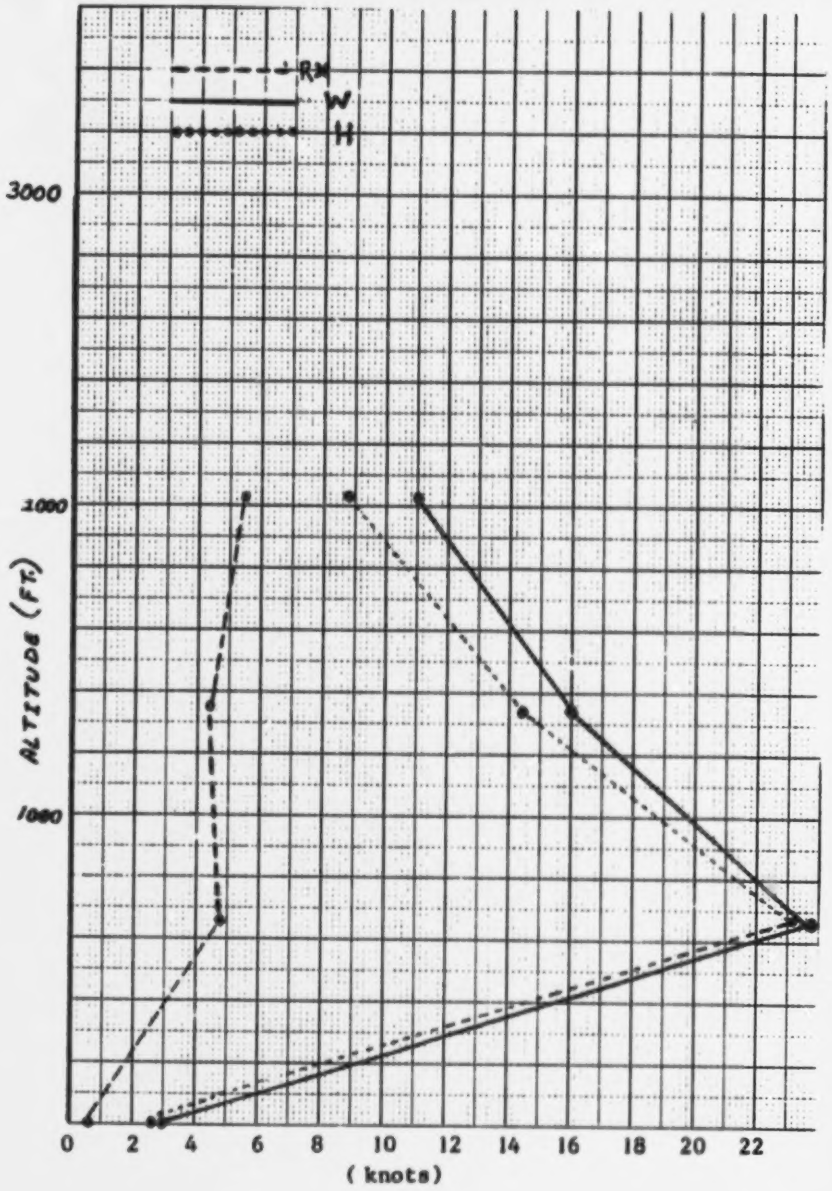
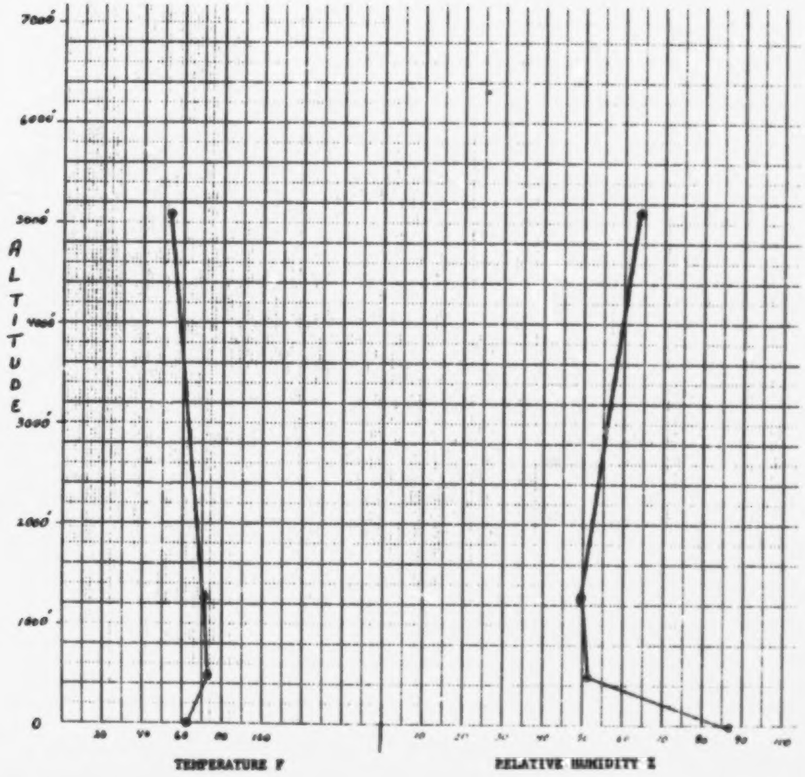


FIGURE E2-3

DATE 6/22/80
ASC. NO. 10
LAUNCH TIME :00 AM



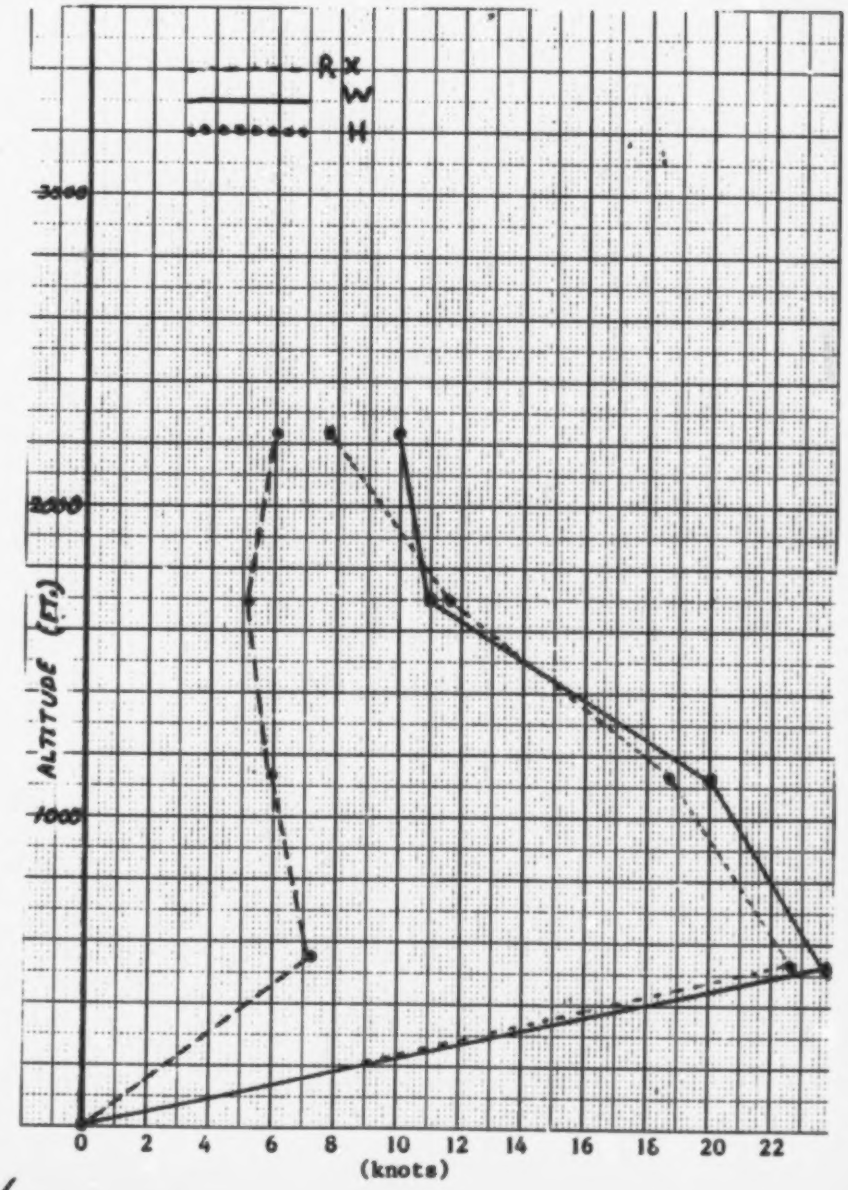
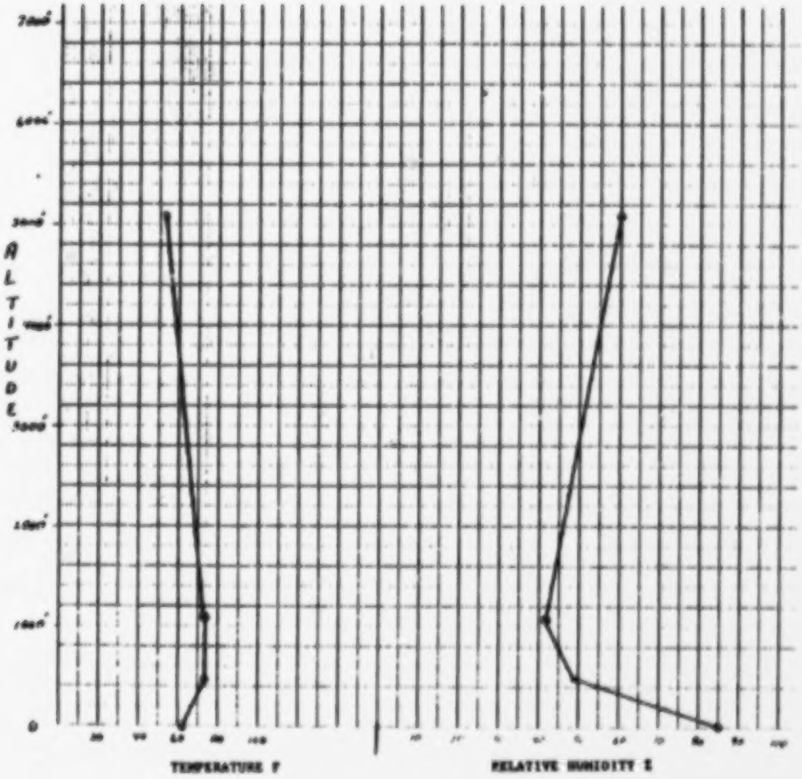


FIGURE E2-4

DATE 6/20/90
ASC. NO. 11
LAUNCH TIME 6:30 AM



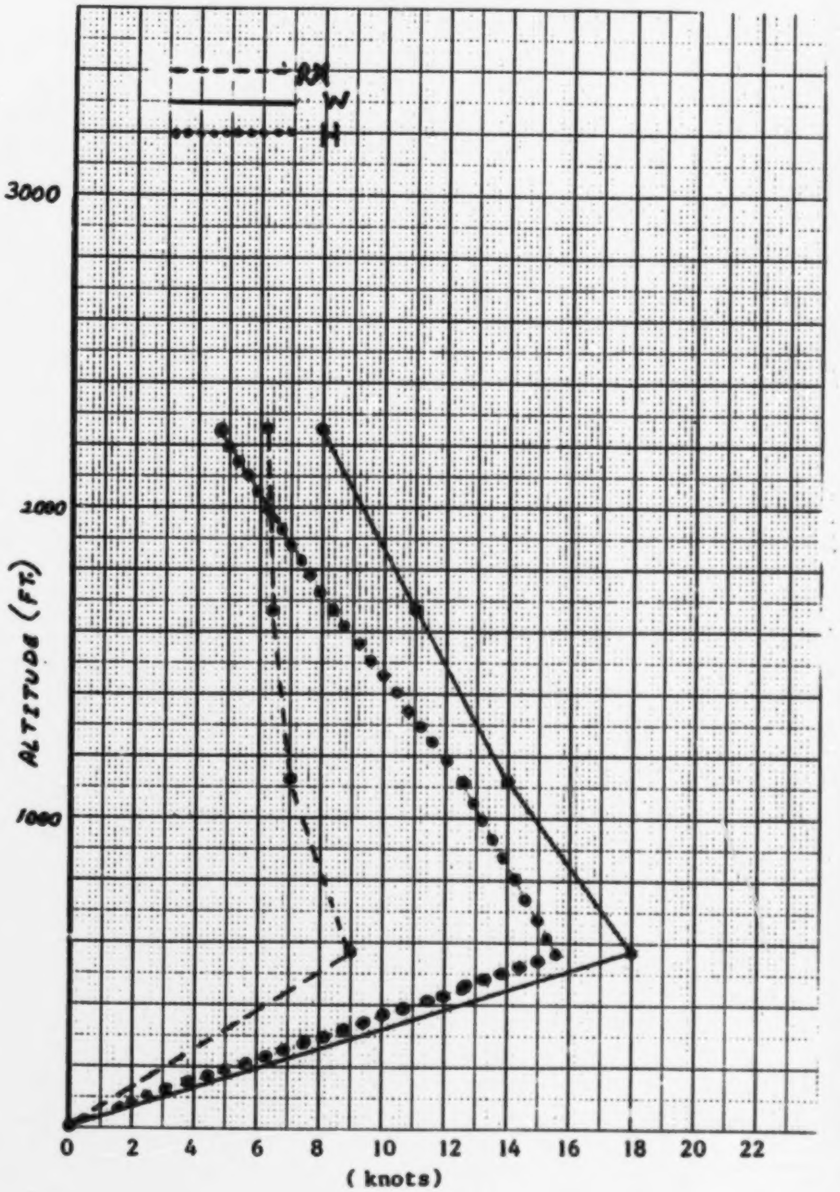
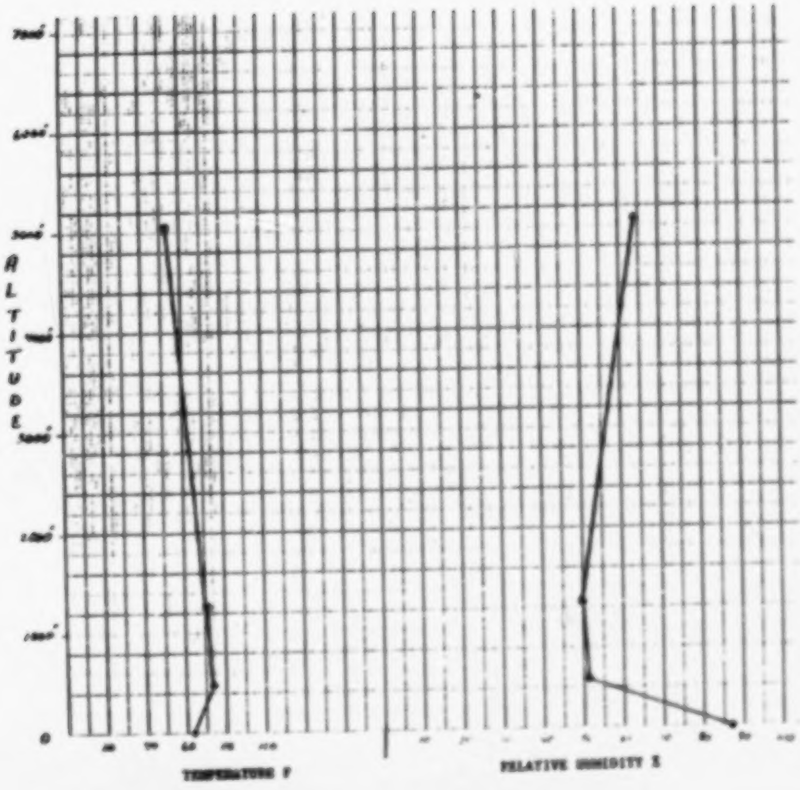


FIGURE E2-5

DATE 6/25/80

ASC. NO. 12

LAUNCH TIME 7:00 AM



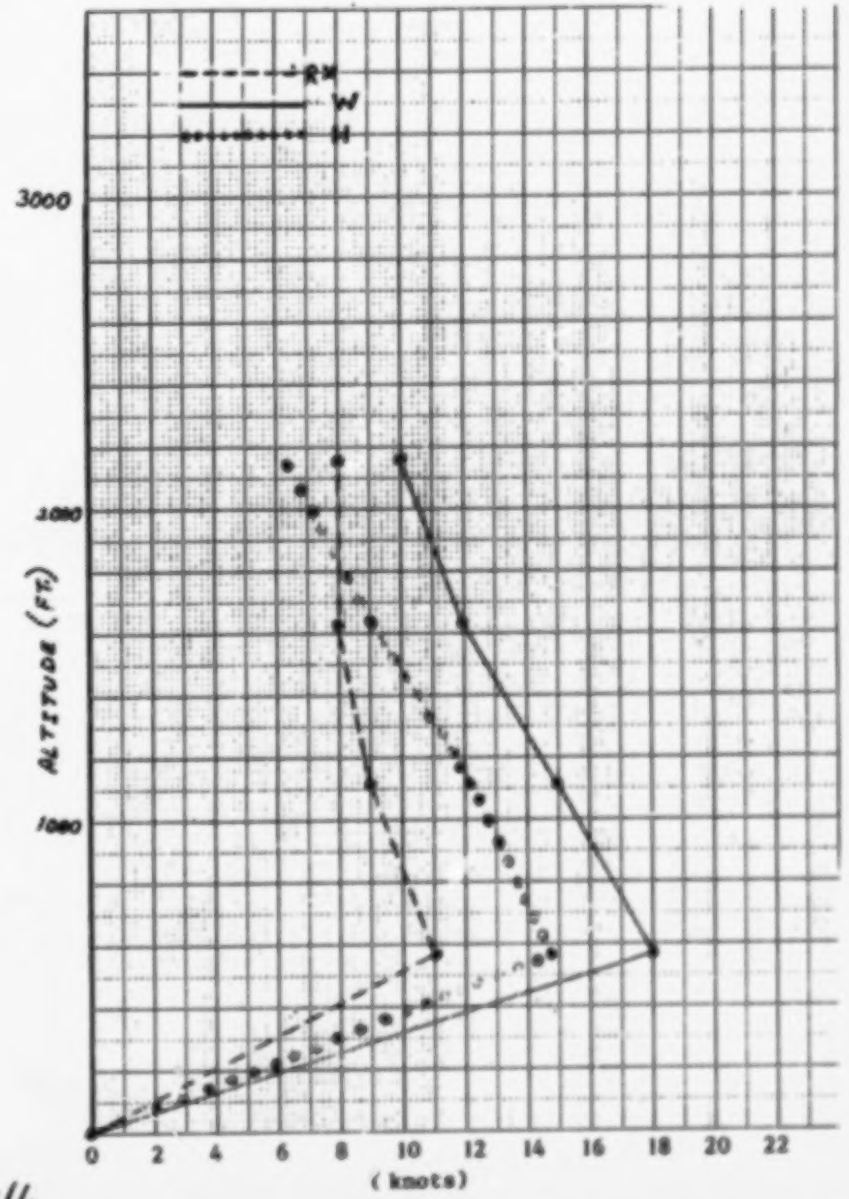
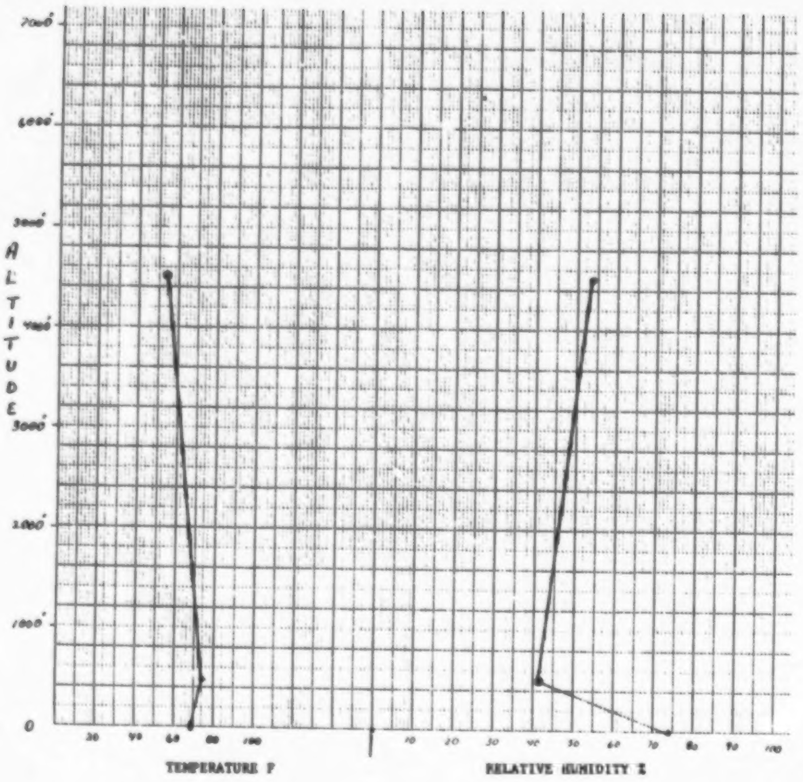


FIGURE E2-6

BEST DOCUMENT AVAILABLE

DATE	6/2[illegible]
ASC. NO.	13
LAUNCH TIME	7:3[illegible] AM



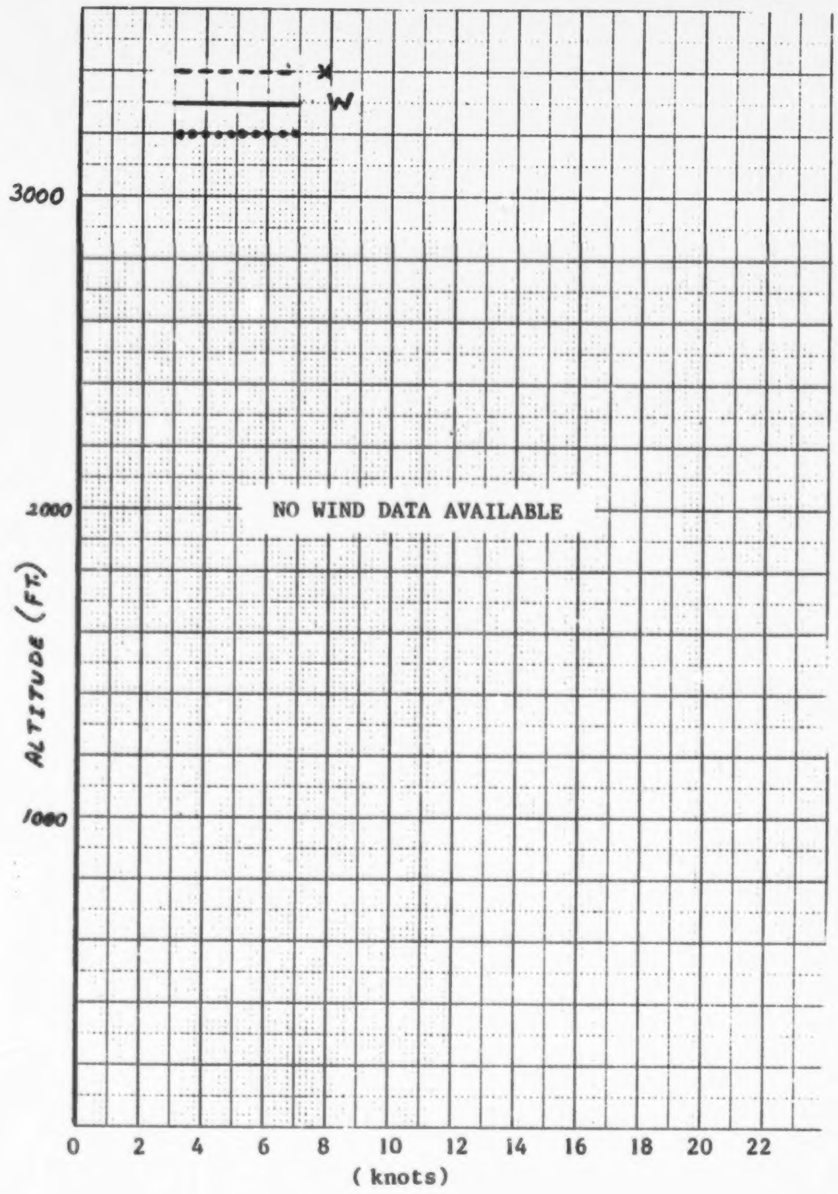
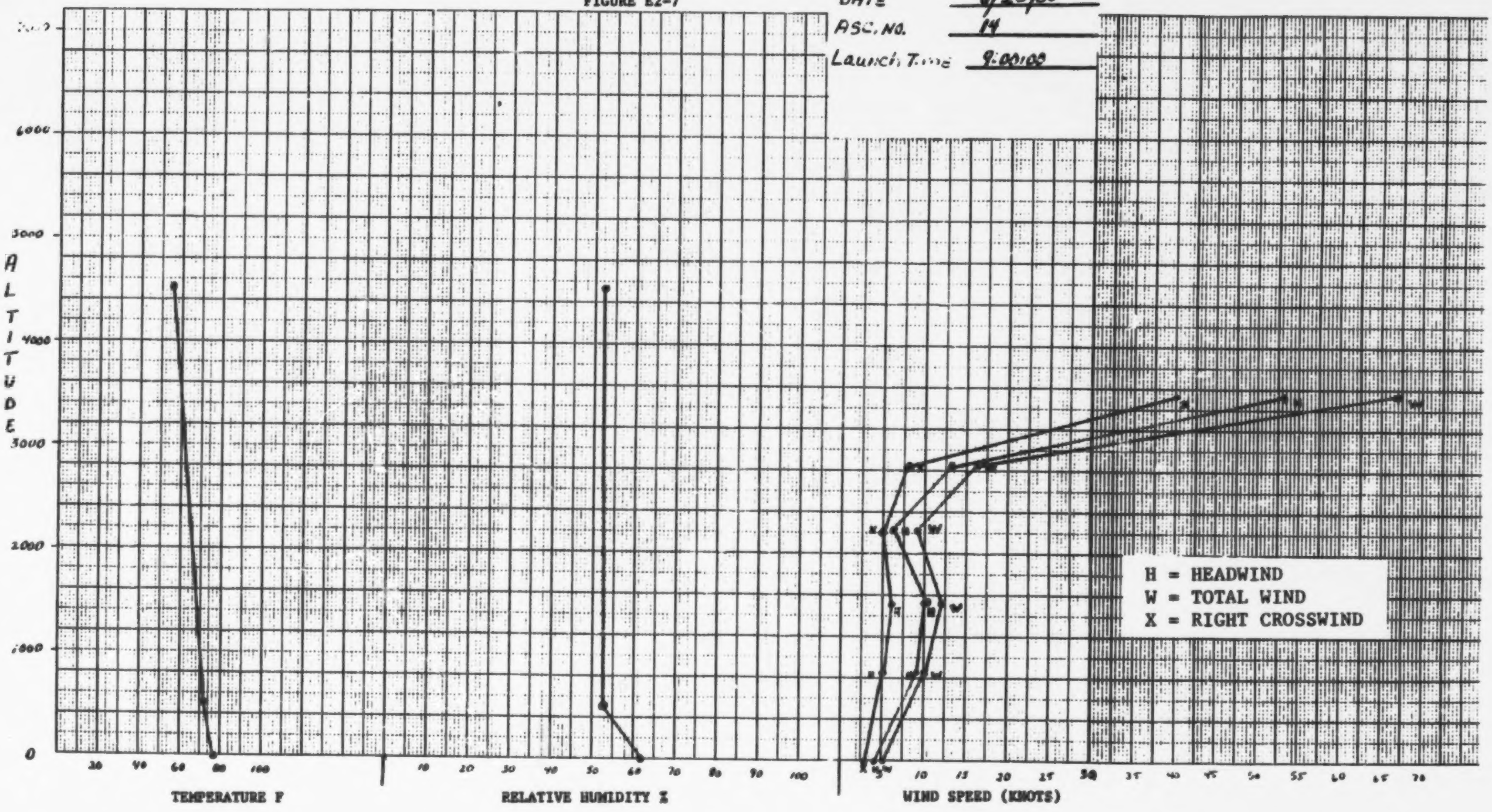


FIGURE E2-7

DATE 6/23/80

ASC. NO. 14

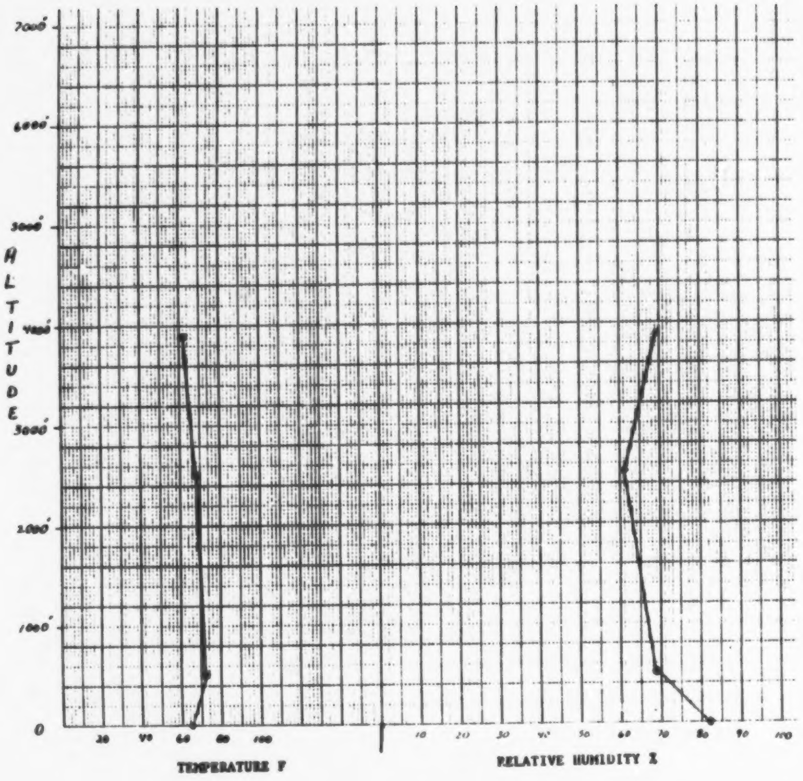
Launch Time 9:00:00



BEST DOCUMENT AVAILABLE

FIGURE E3-1

DATE 6- 80
ASC. NO. 15
LAUNCH TIME 5:6 116



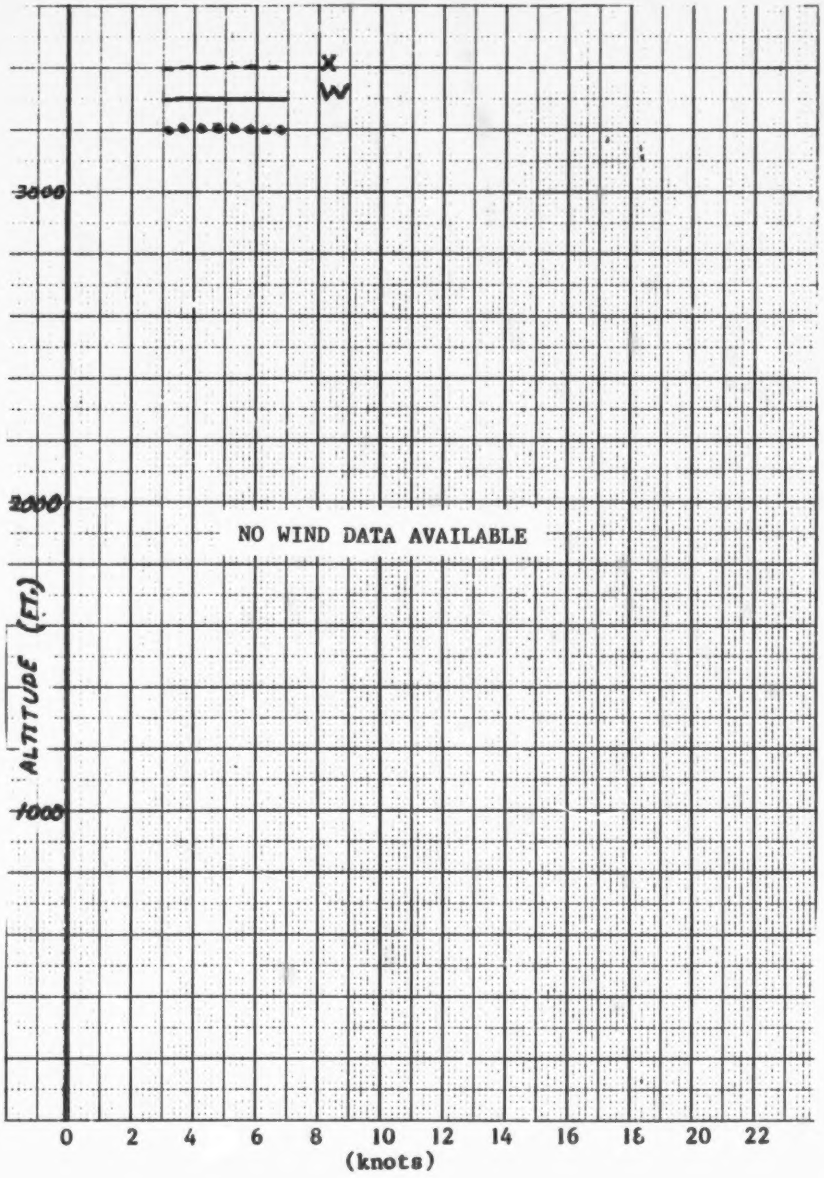


FIGURE E3-2

DATE 6/24/80
ASC. NO. 16
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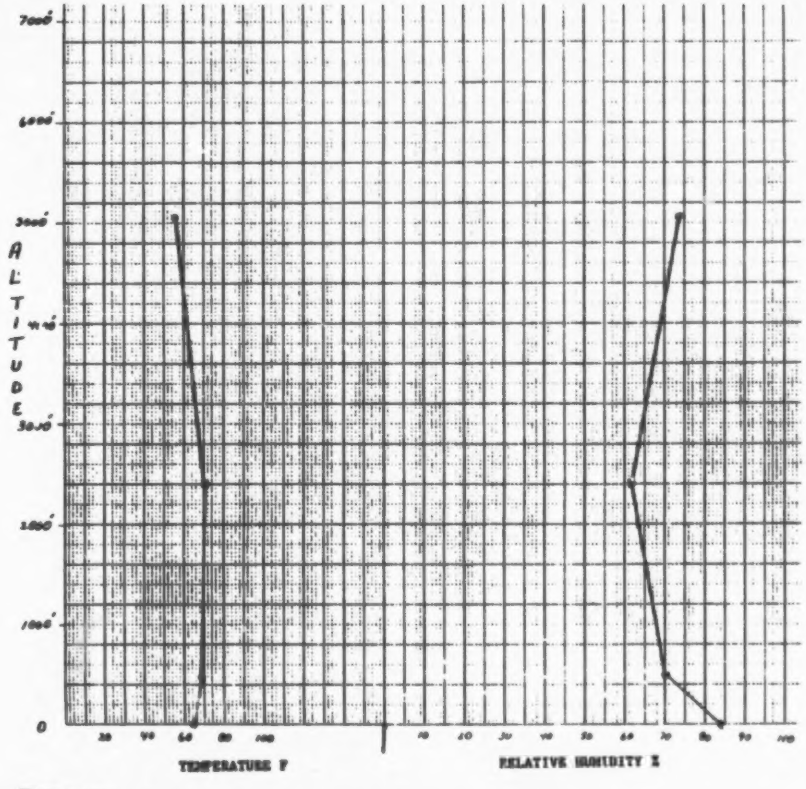


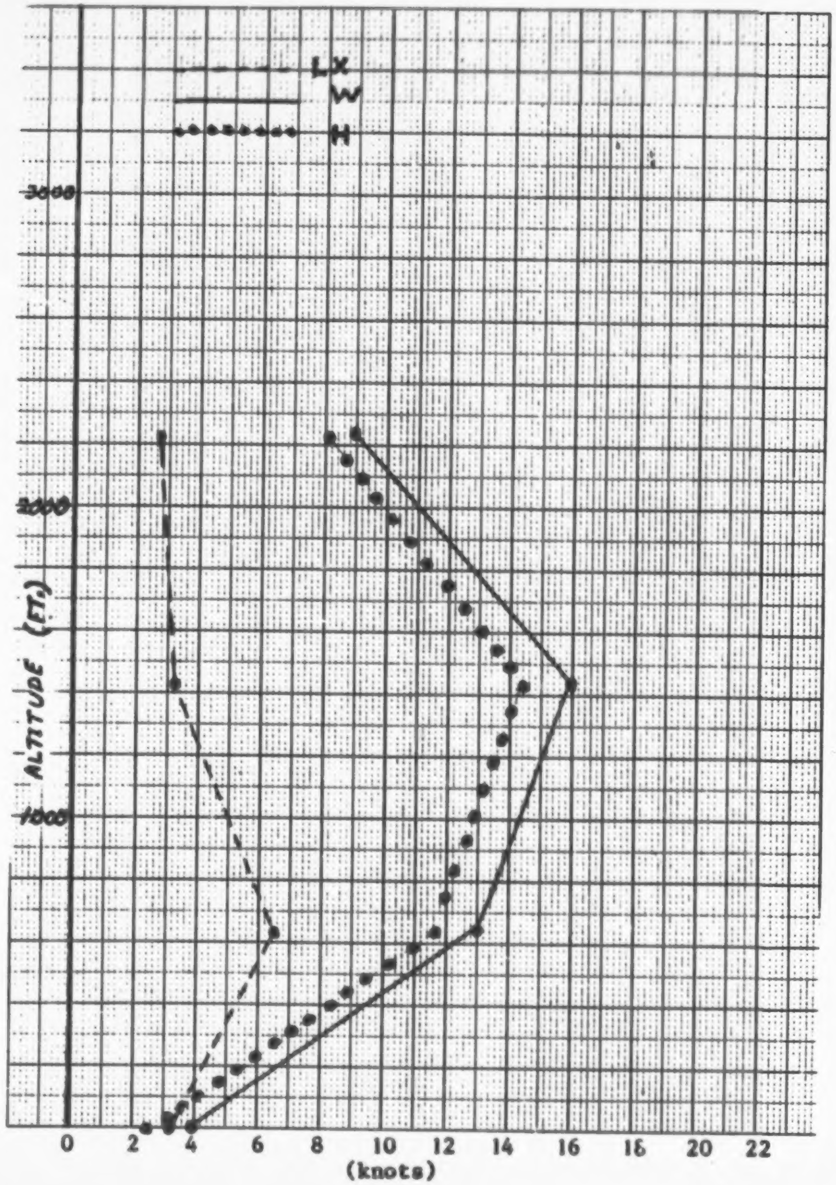


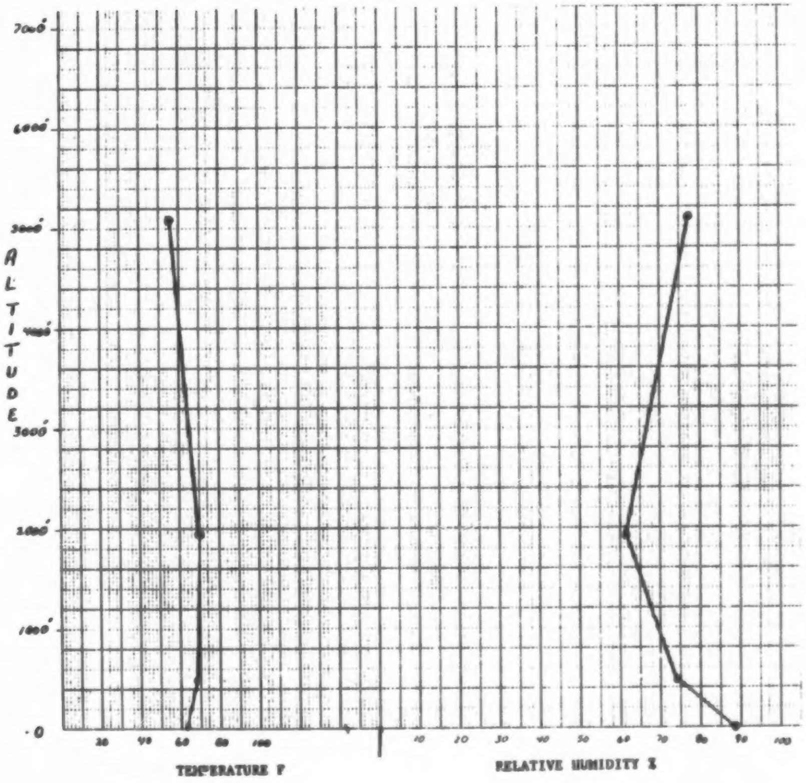
FIGURE E3-3

BEST DOCUMENT AVAILABLE

DATE [illegible]

ASC. NO. 17

LAUNCH TIME 6:00 AM



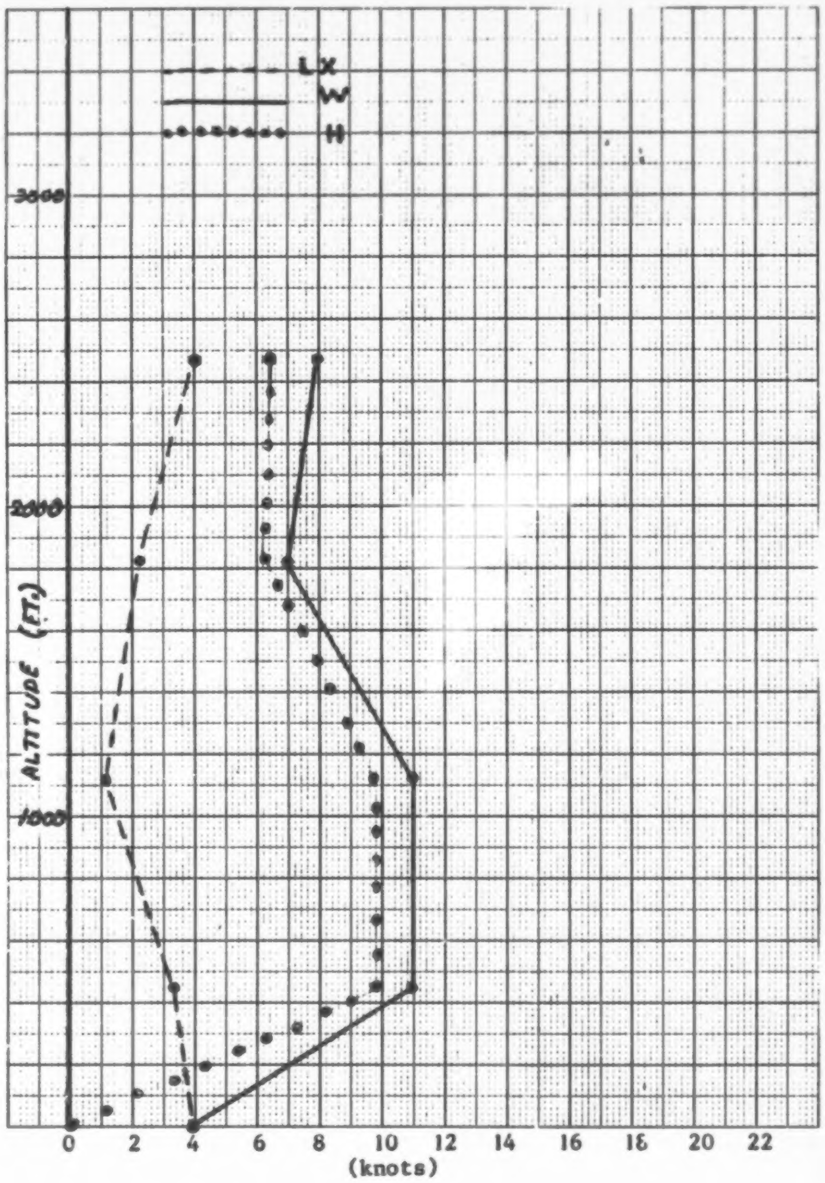


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FIGURE E3-4

DATE 6/20/72
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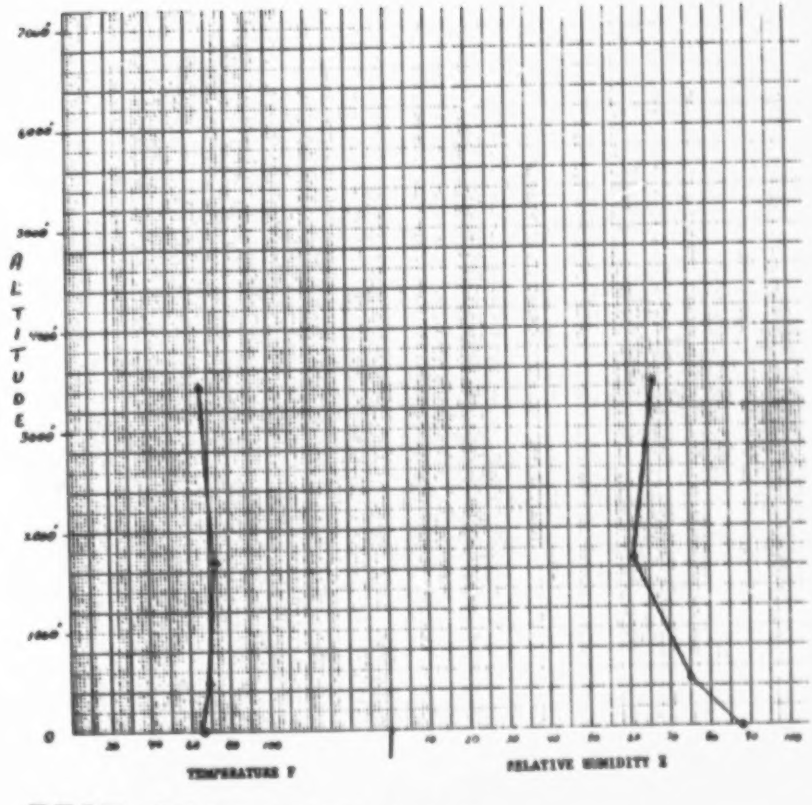
LAUNCH TIME 6:00 AM



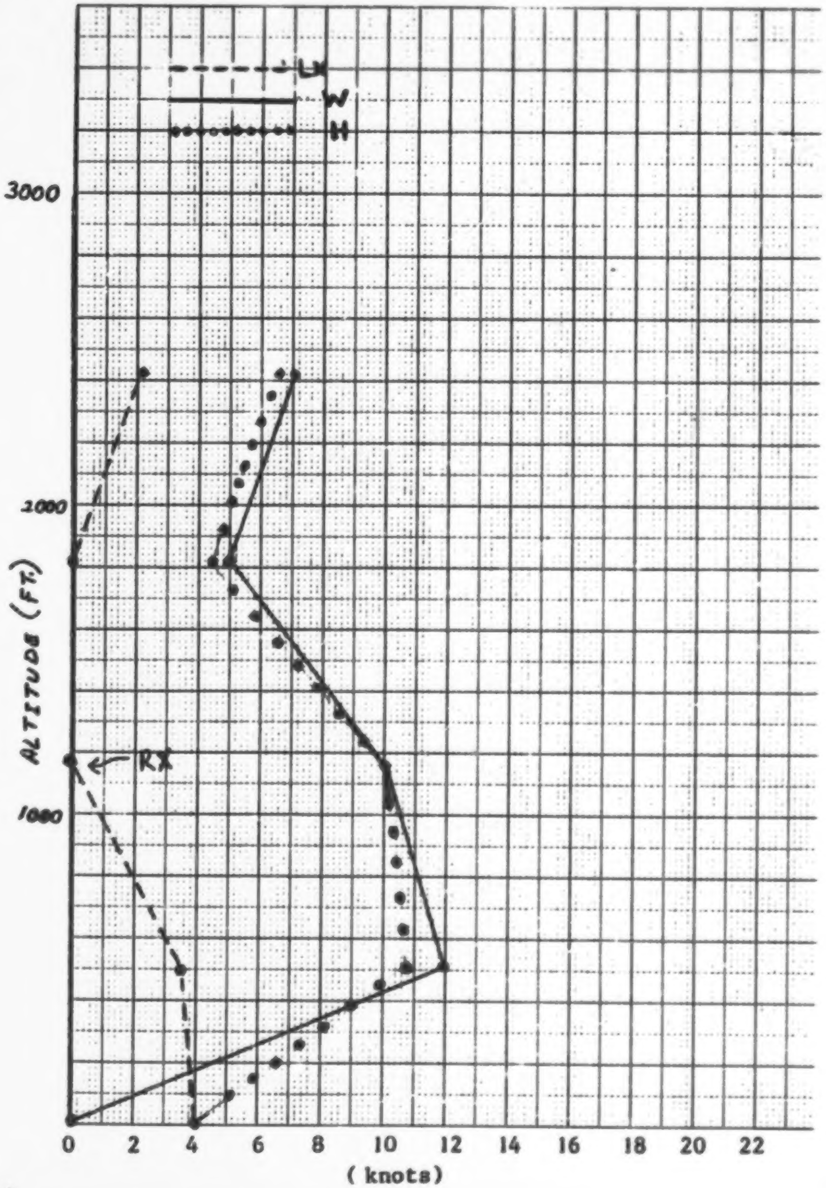
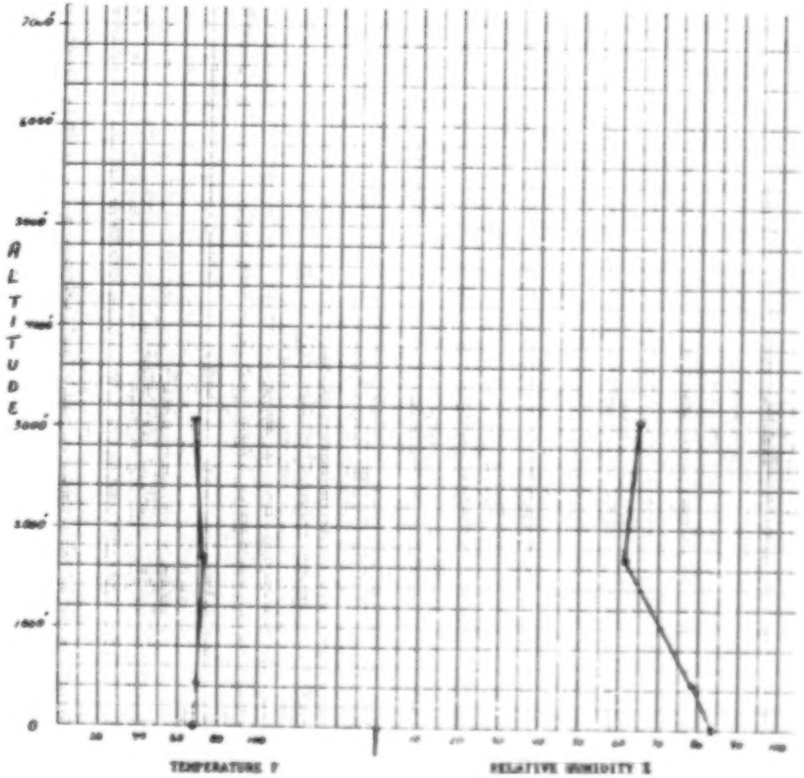


FIGURE E3-5

DATE [illegible]

ASC. NO. [illegible]

LAUNCH TIME [illegible]



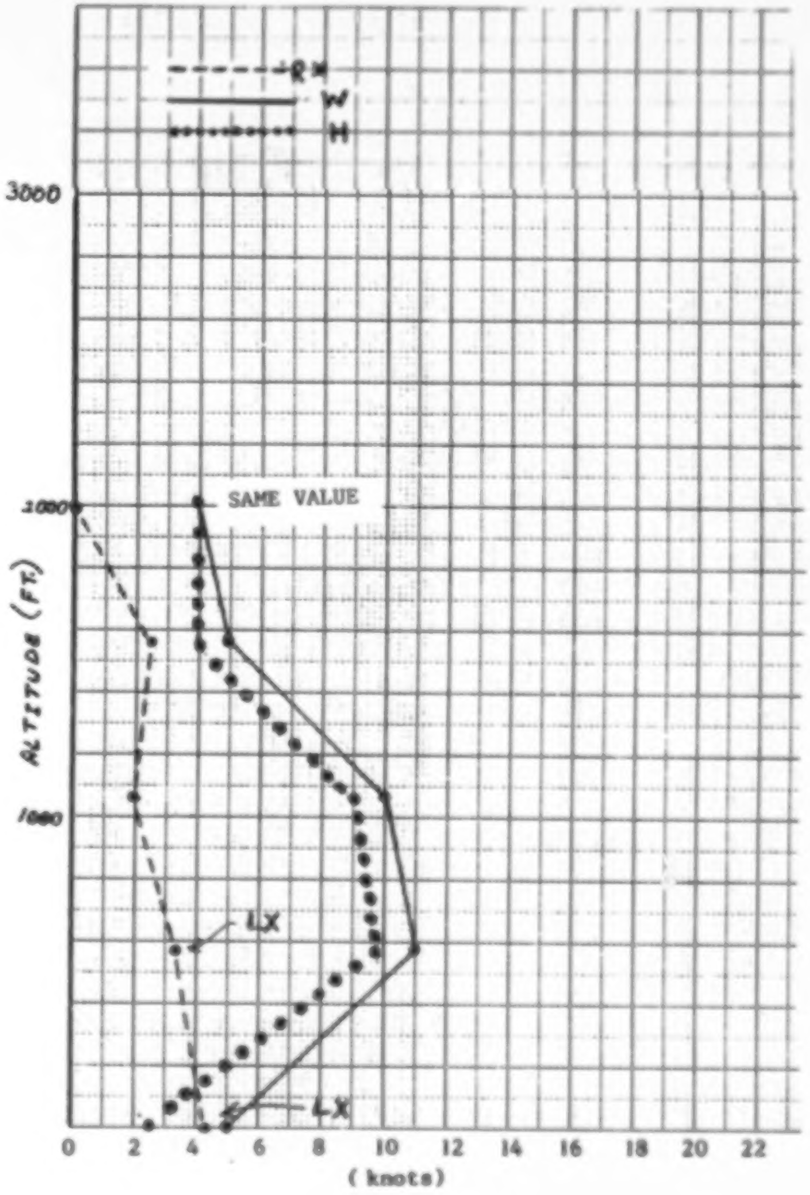
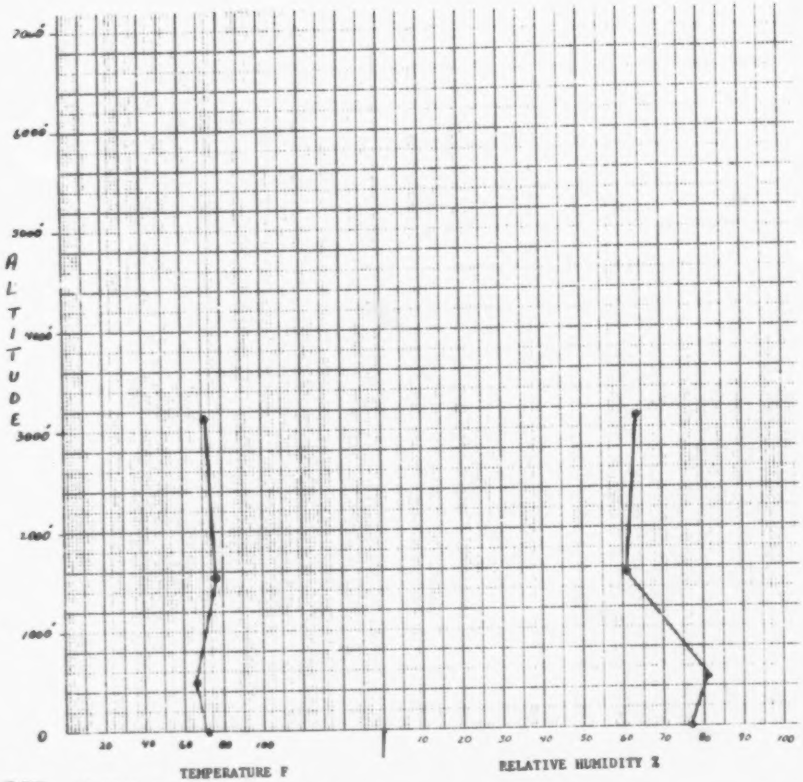


FIGURE E3-6

DATE 6/24-3

ASC. NO. 20

LAUNCH TIME 8[illegible] 8/1



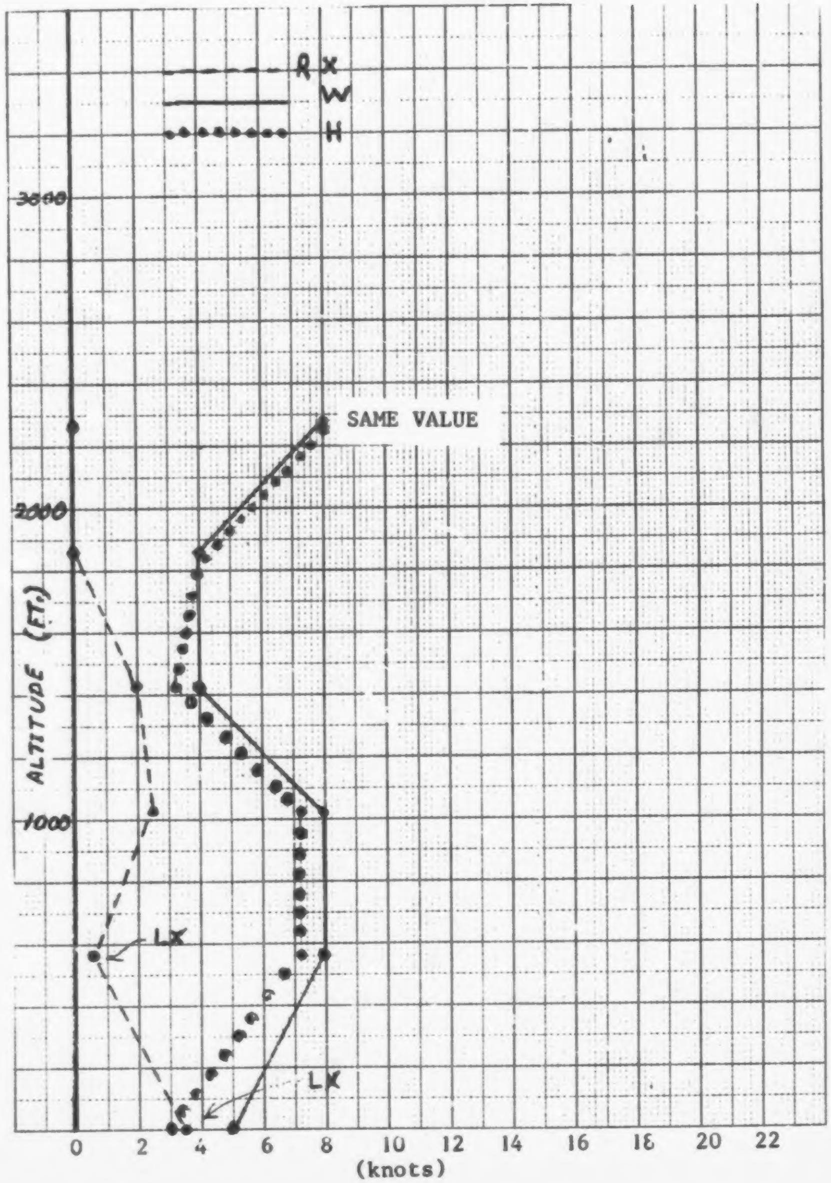
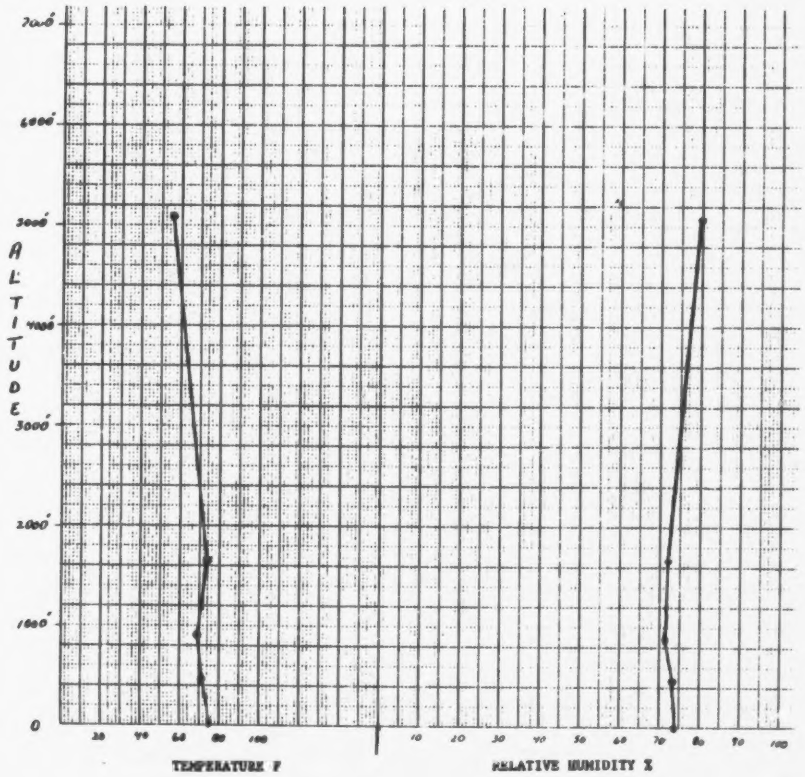


FIGURE E3-7

DATE	6/20/90
ASC. NO.	21
LAUNCH TIME	9:00 AM



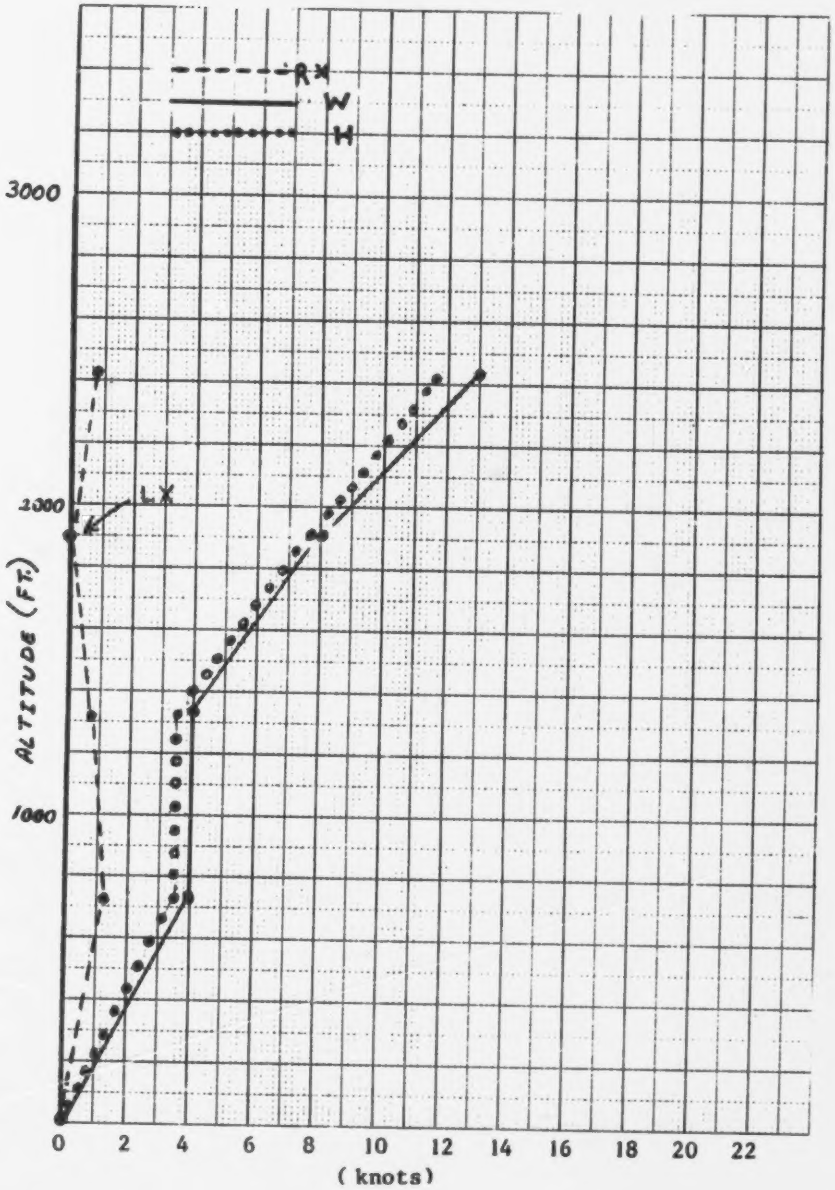


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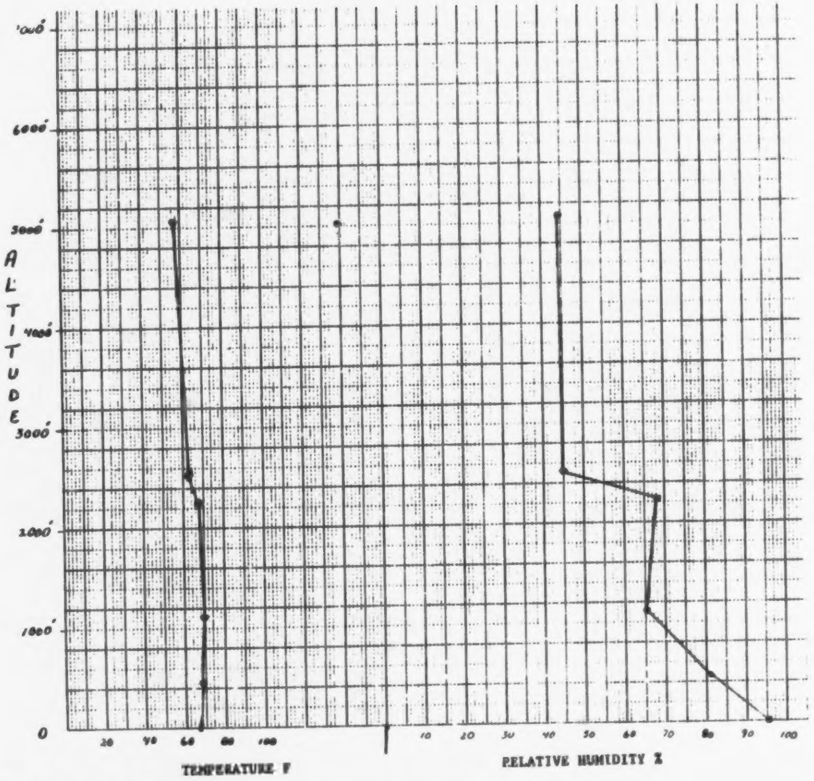
FIGURE E4-1

DATE 6/2 80

ASC. NO. 2

LAUNCH TIME 5:00 AM



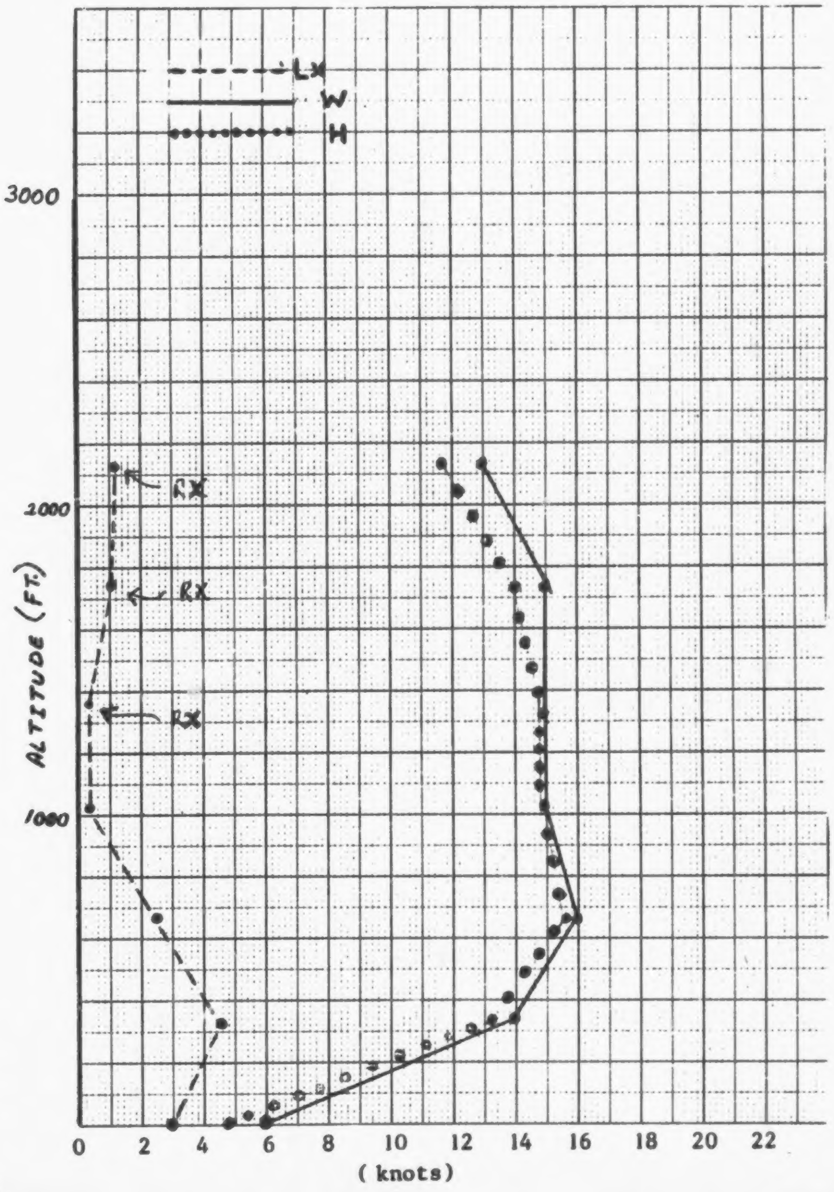


FIGURE E4-2

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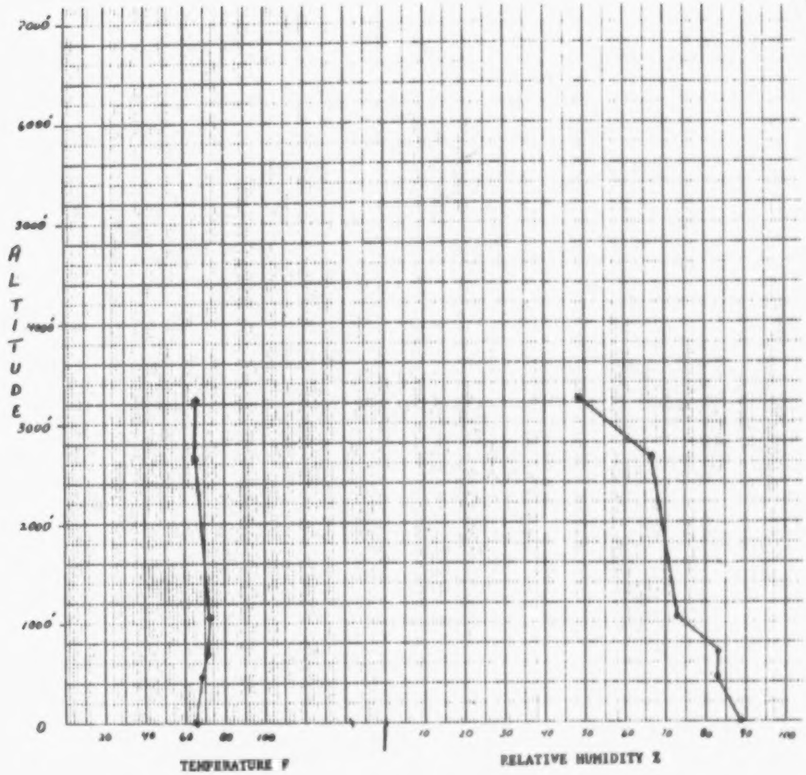

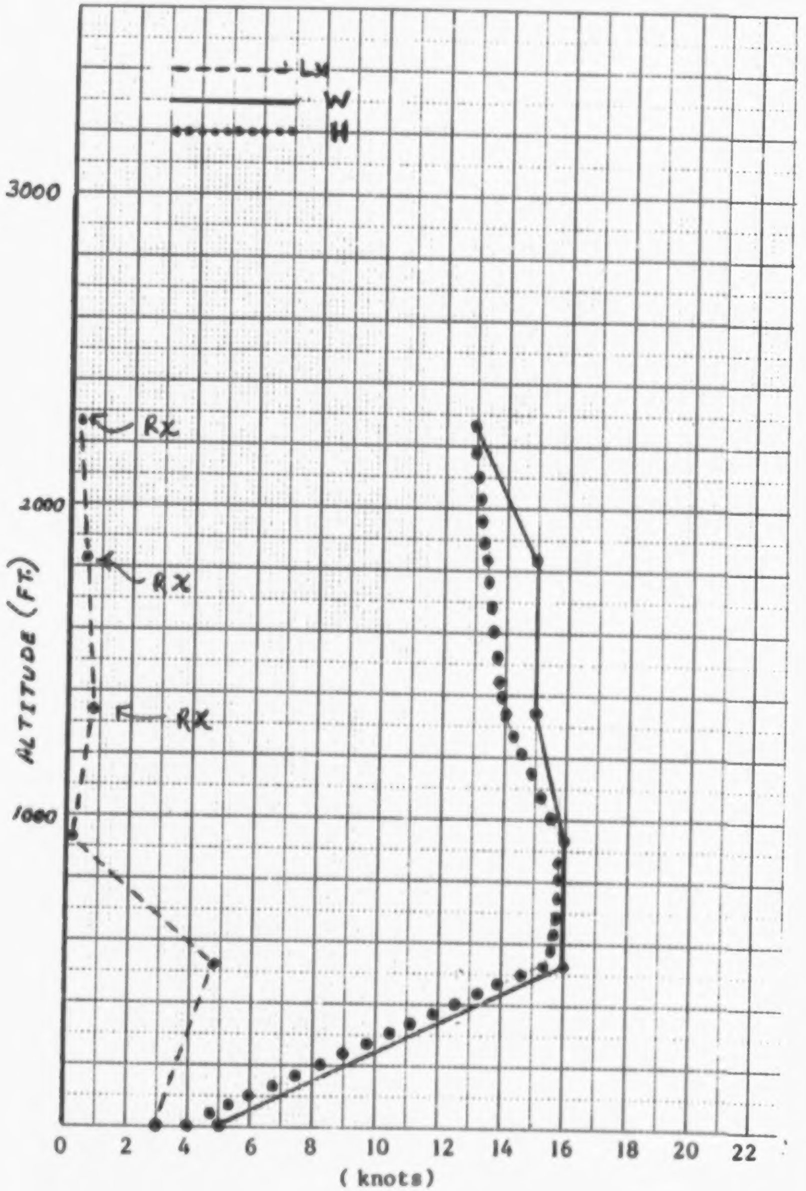

FIGURE E4-3

DATE 6/25 40
ASC. NO. 24
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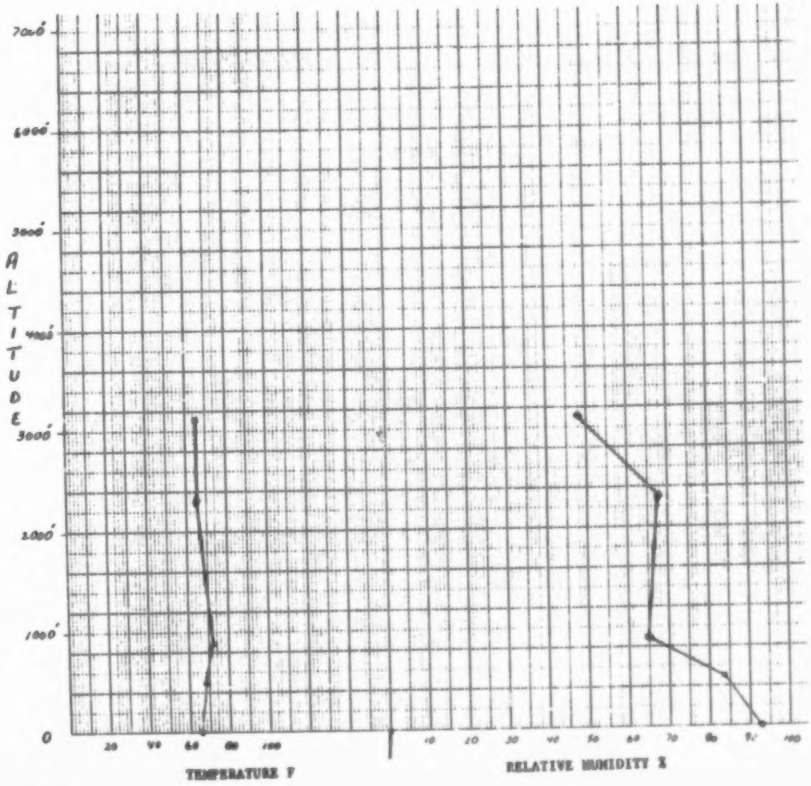

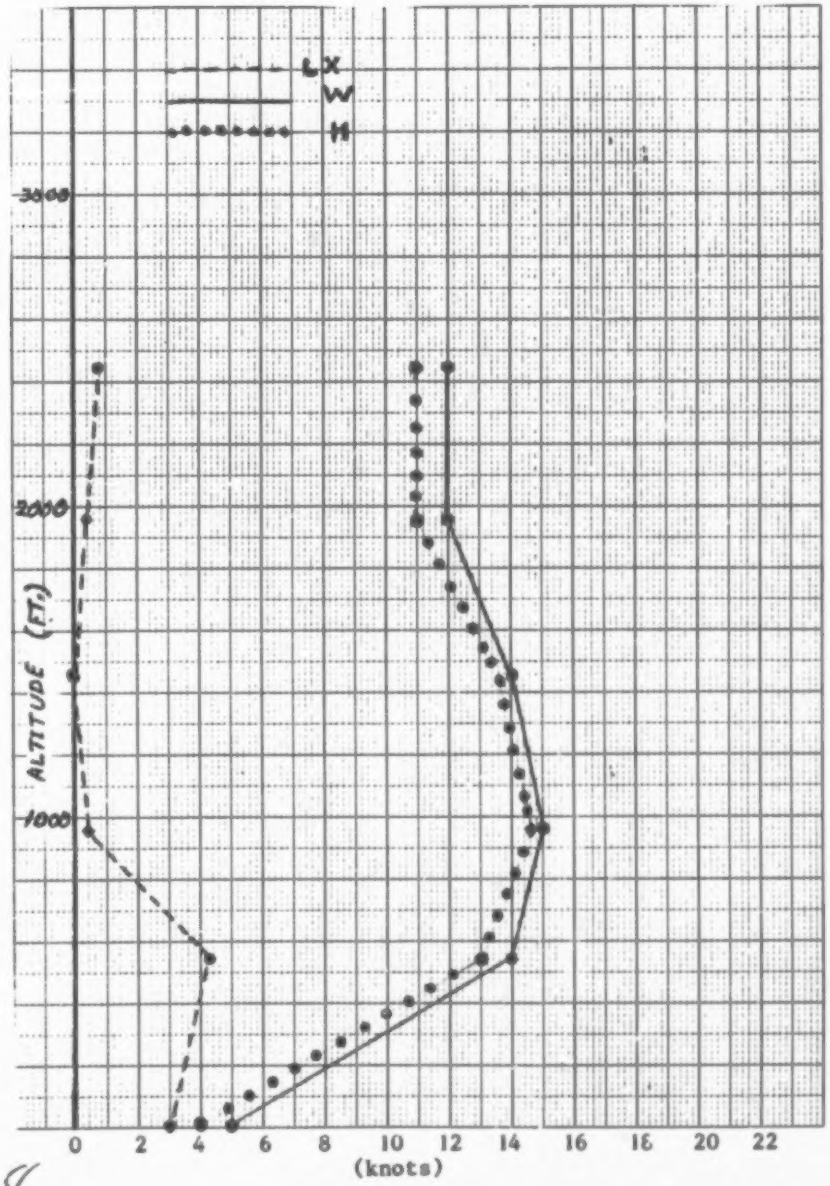

FIGURE E4-4

DATE 6/2-/9.
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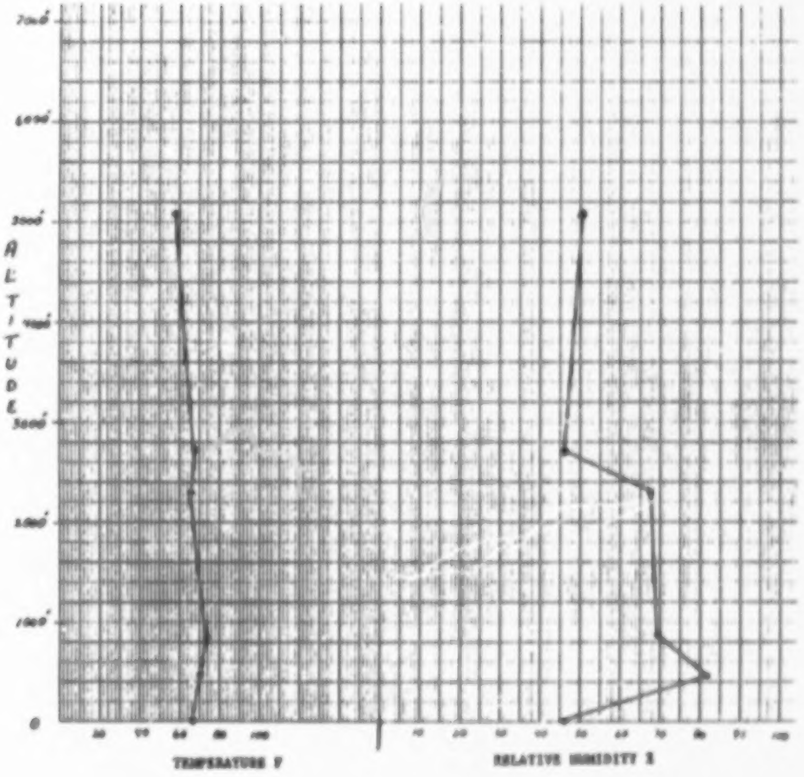

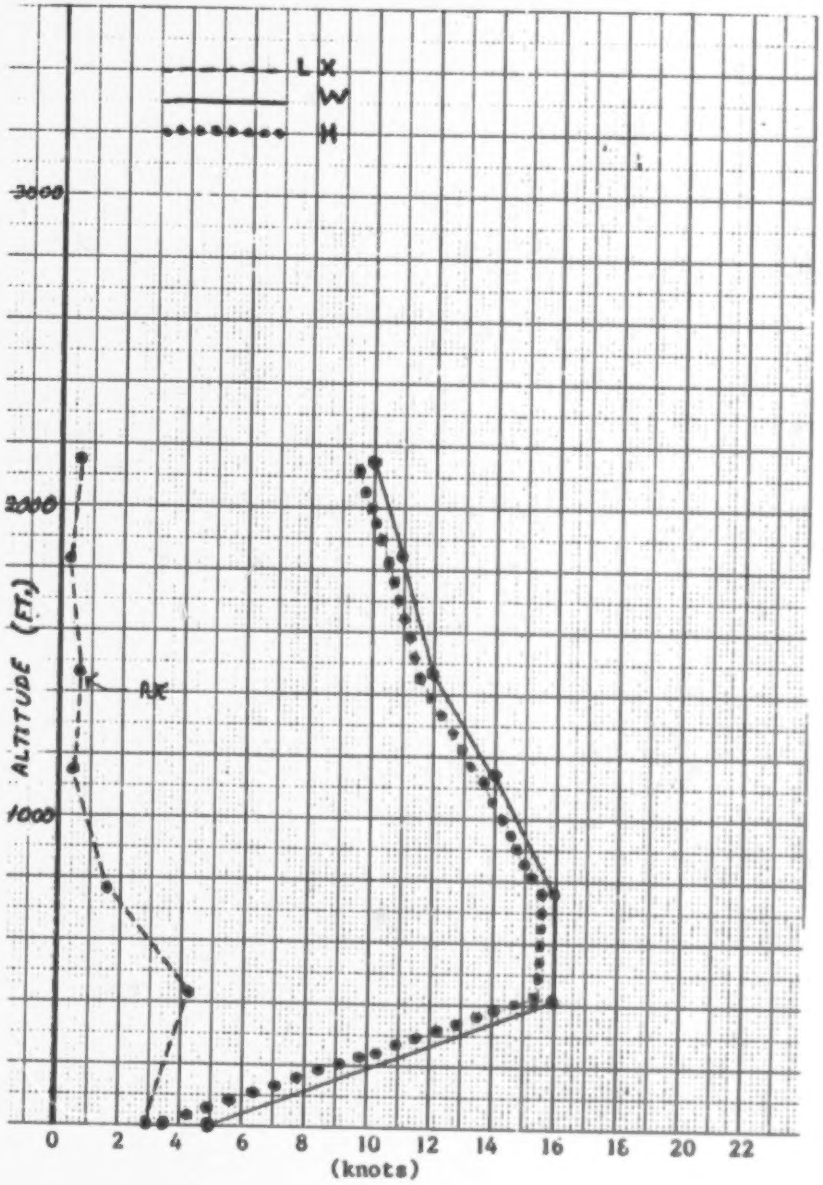

FIGURE E4-5

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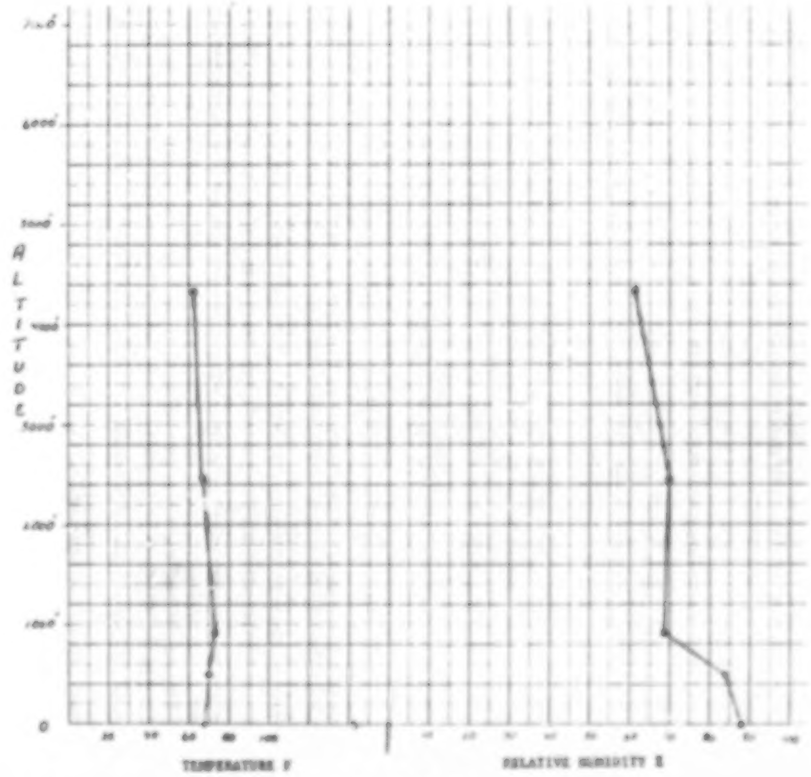

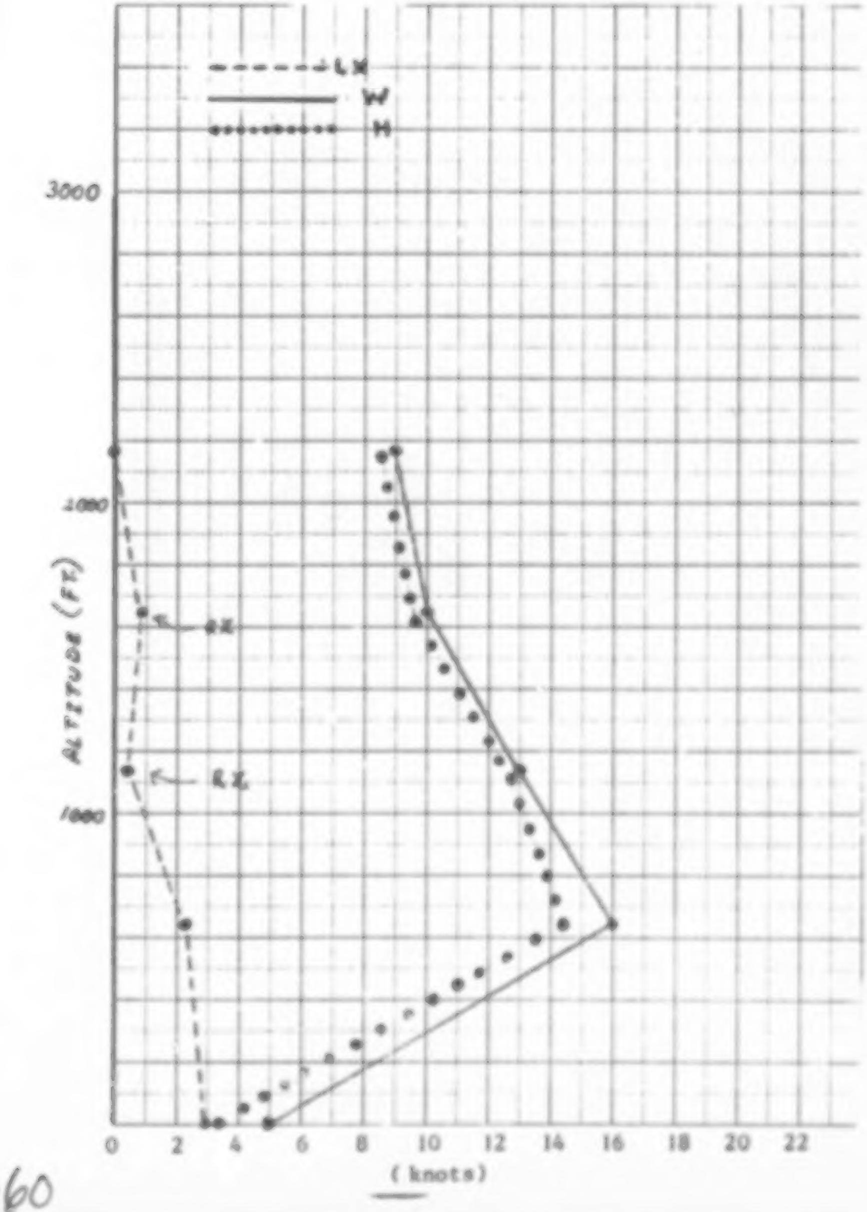

660

FIGURE E4-6

DATE [illegible]-7/22
ASC. NO. 27
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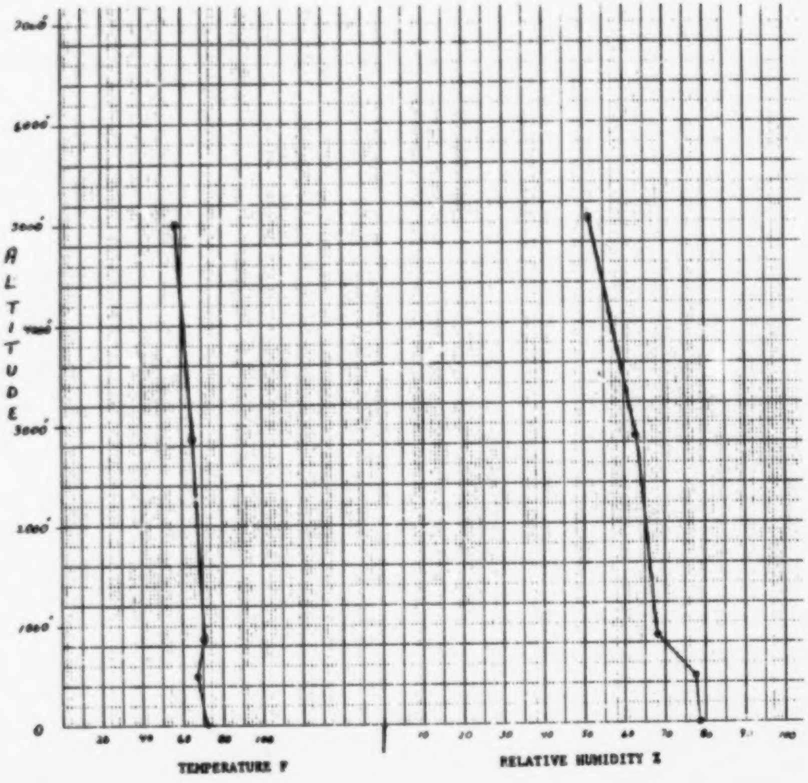

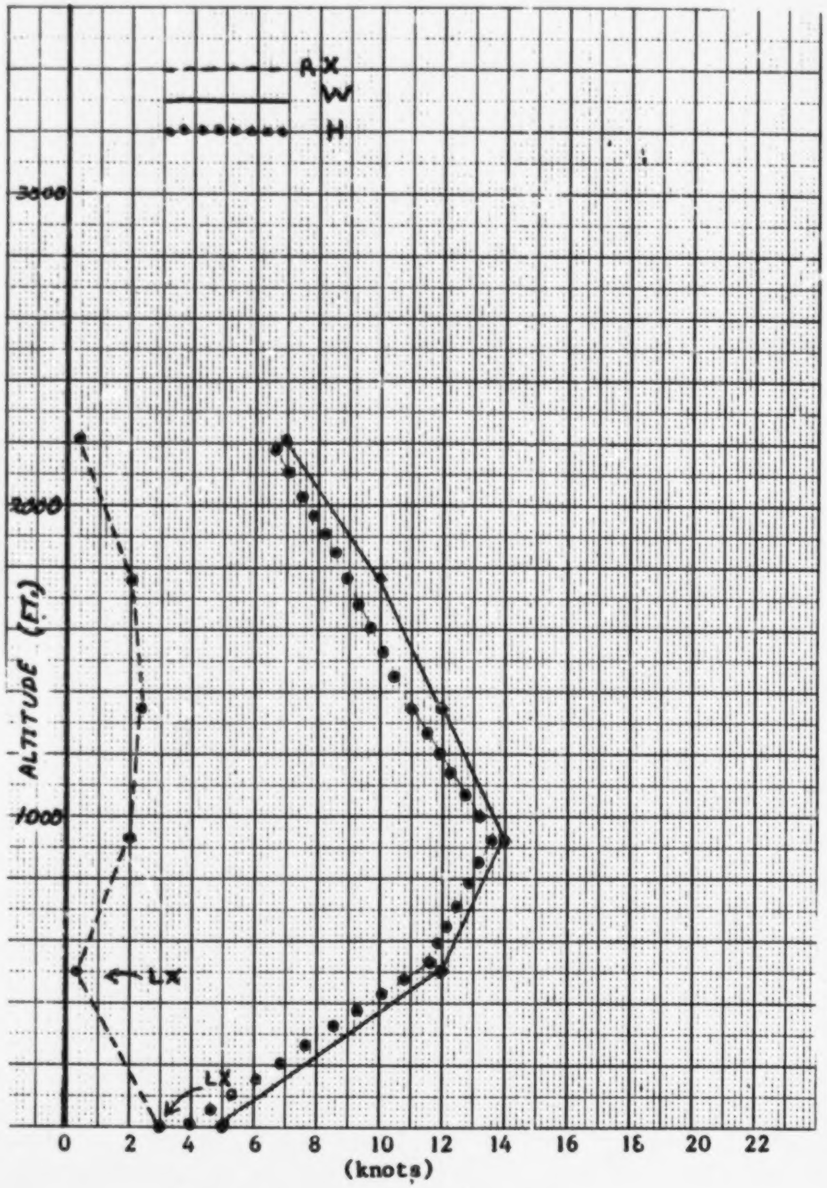

FIGURE E4-7

DATE 6/25/80

ASC. NO. 28

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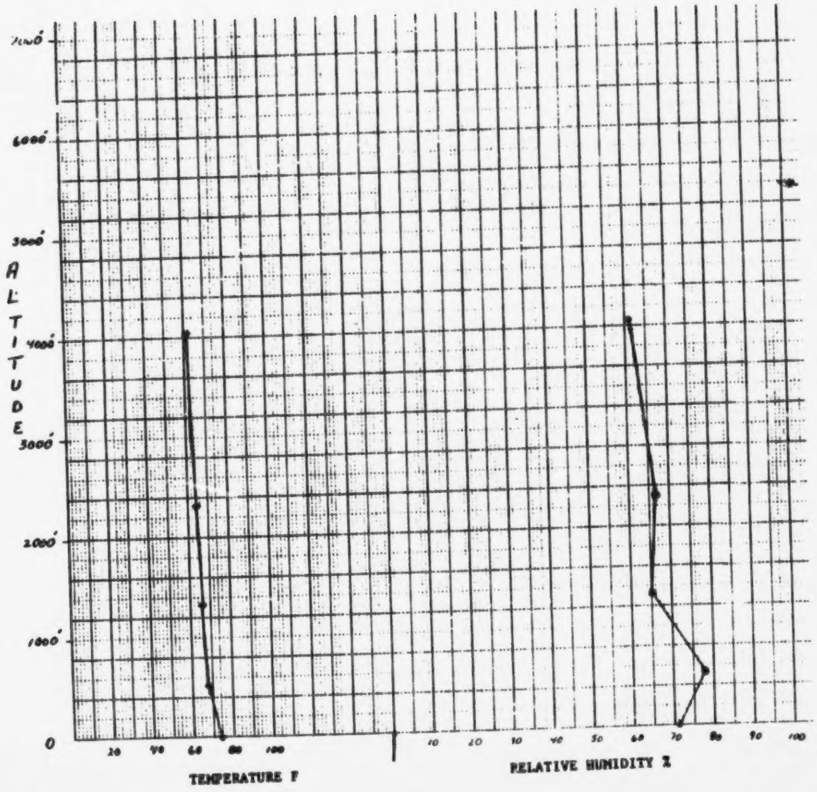

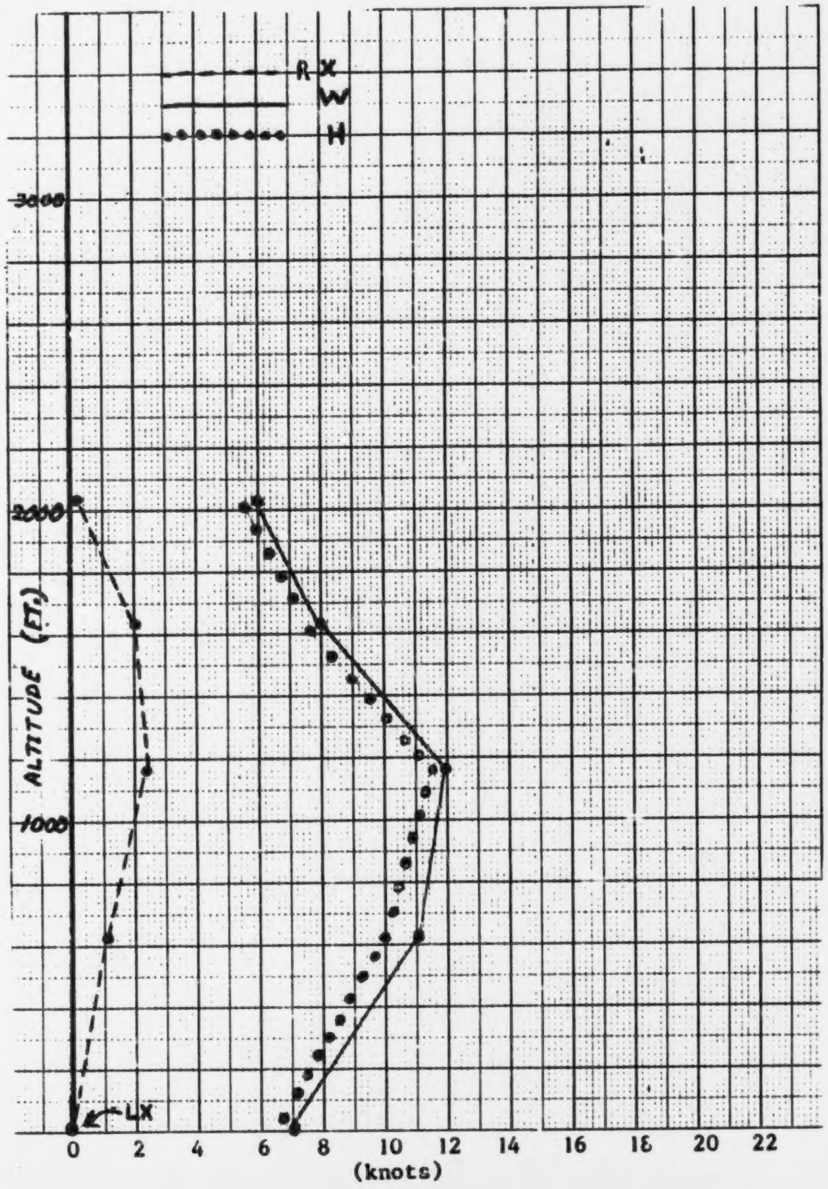

FIGURE E5-1

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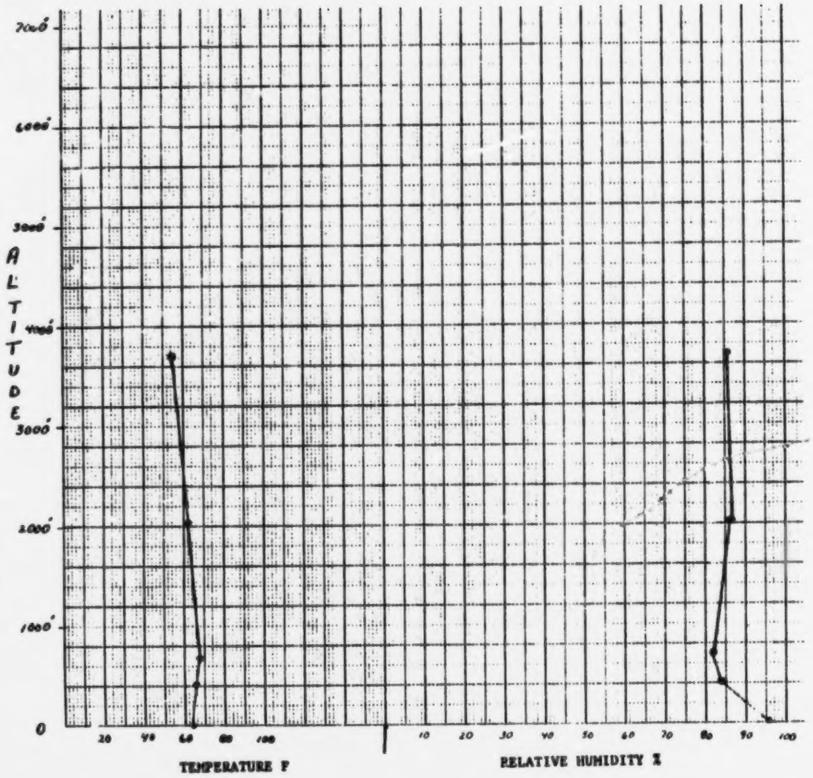

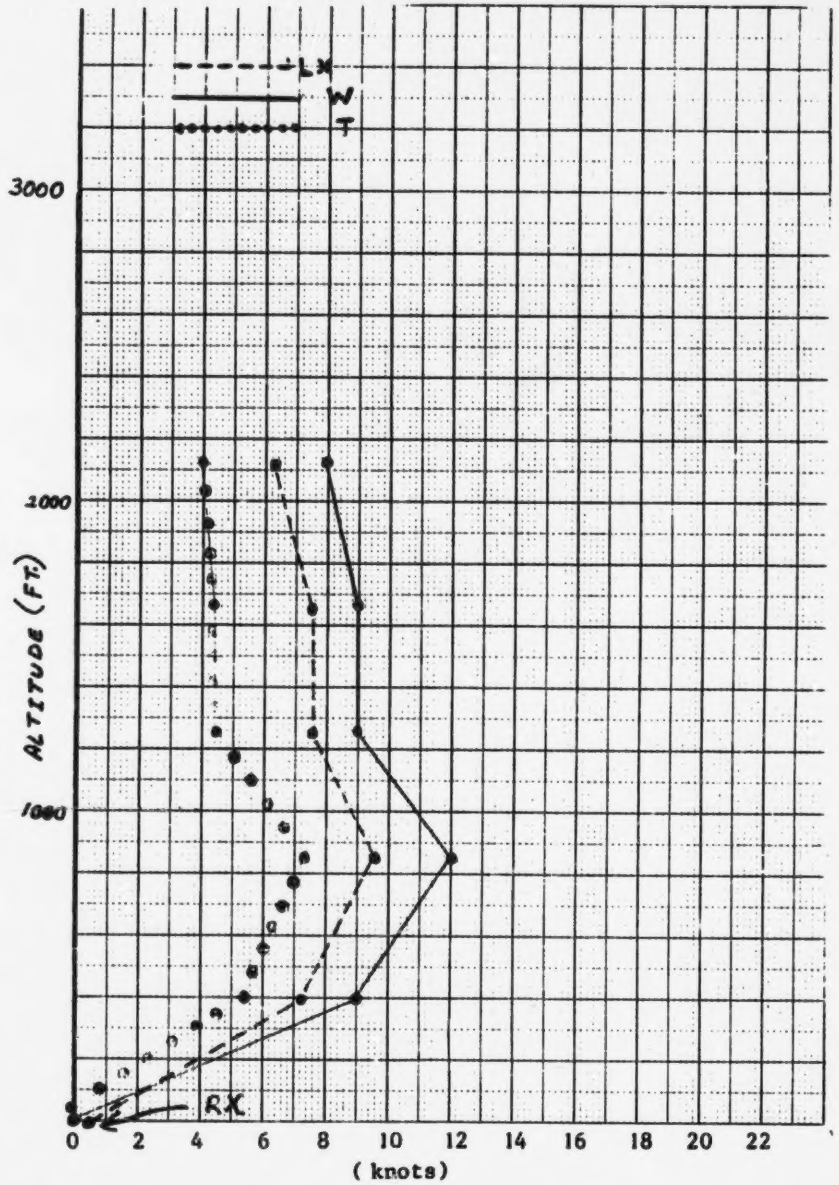

FIGURE E5-2

DATE 6/26/90

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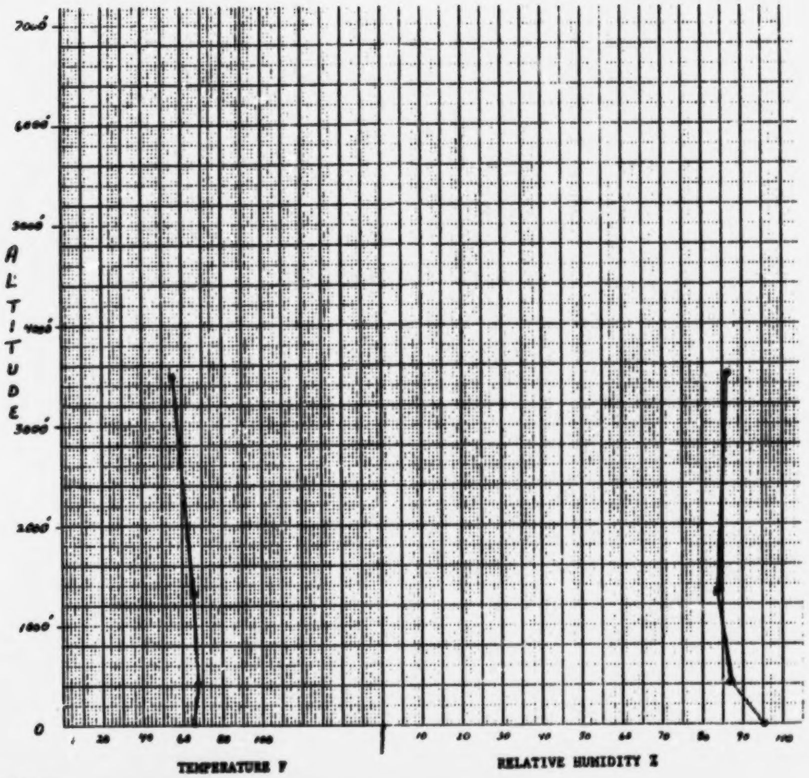
LAUNCH TIME 5:30 AM



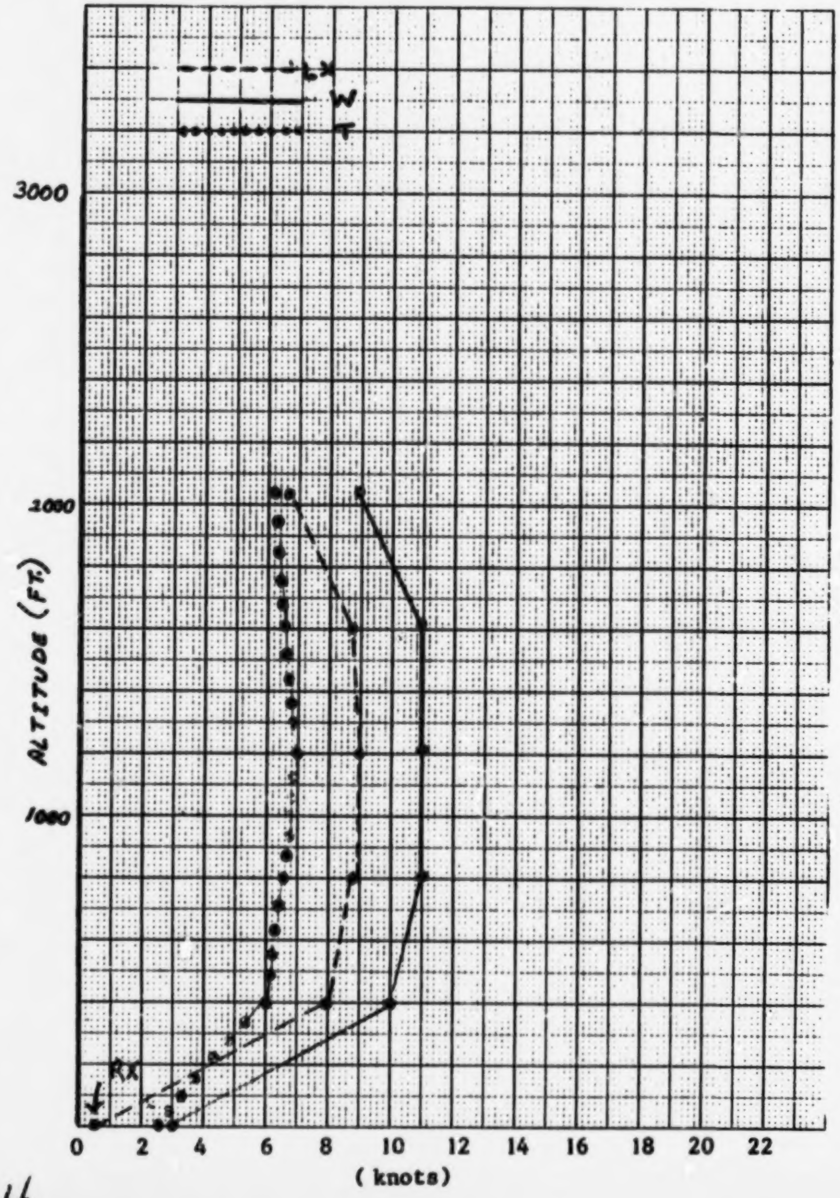


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FIGURE E5-3

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DATE 6/26/90
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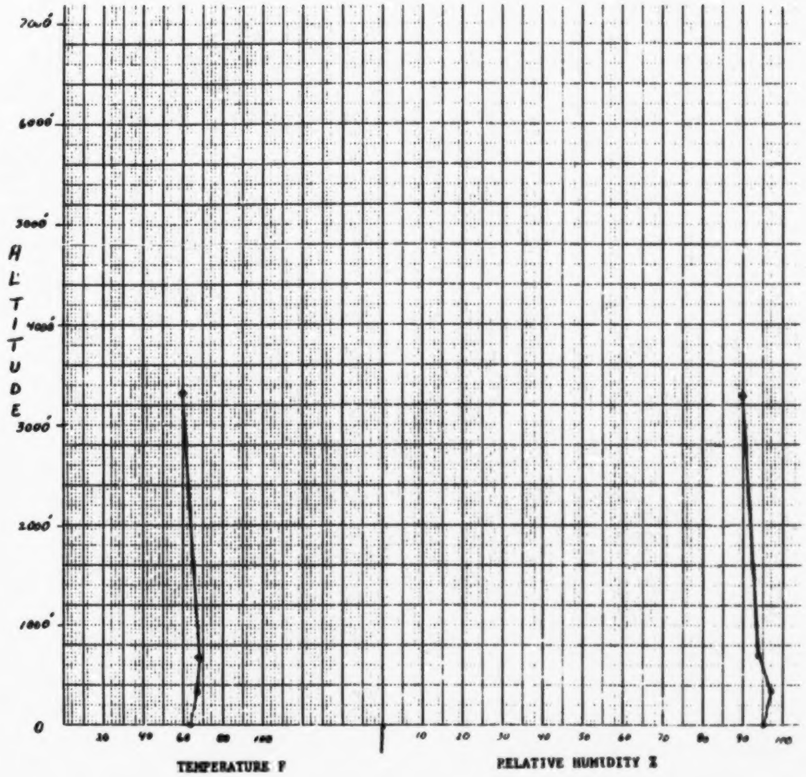

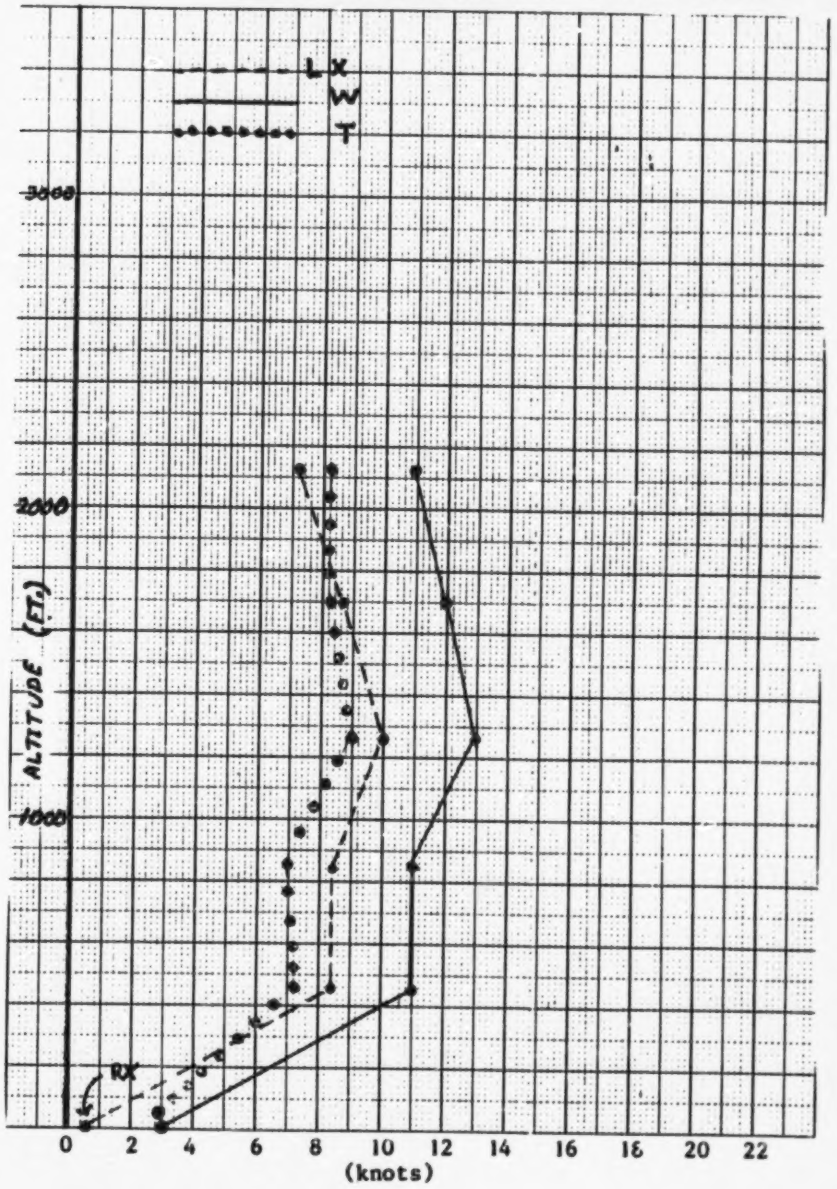

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FIGURE E5-4

DATE 7/23/90
ASC. NO. 32
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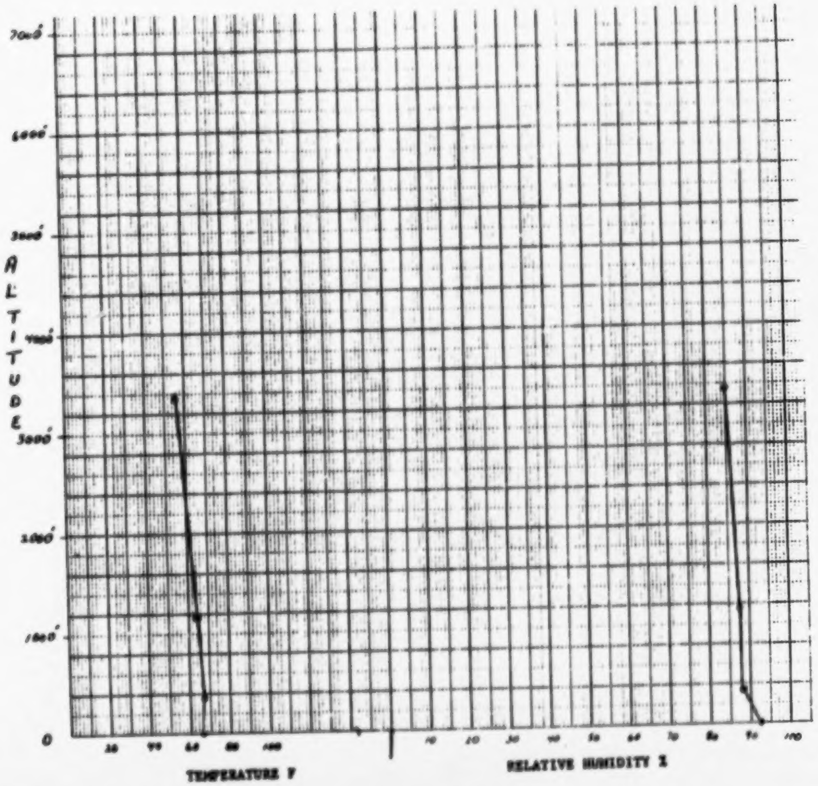

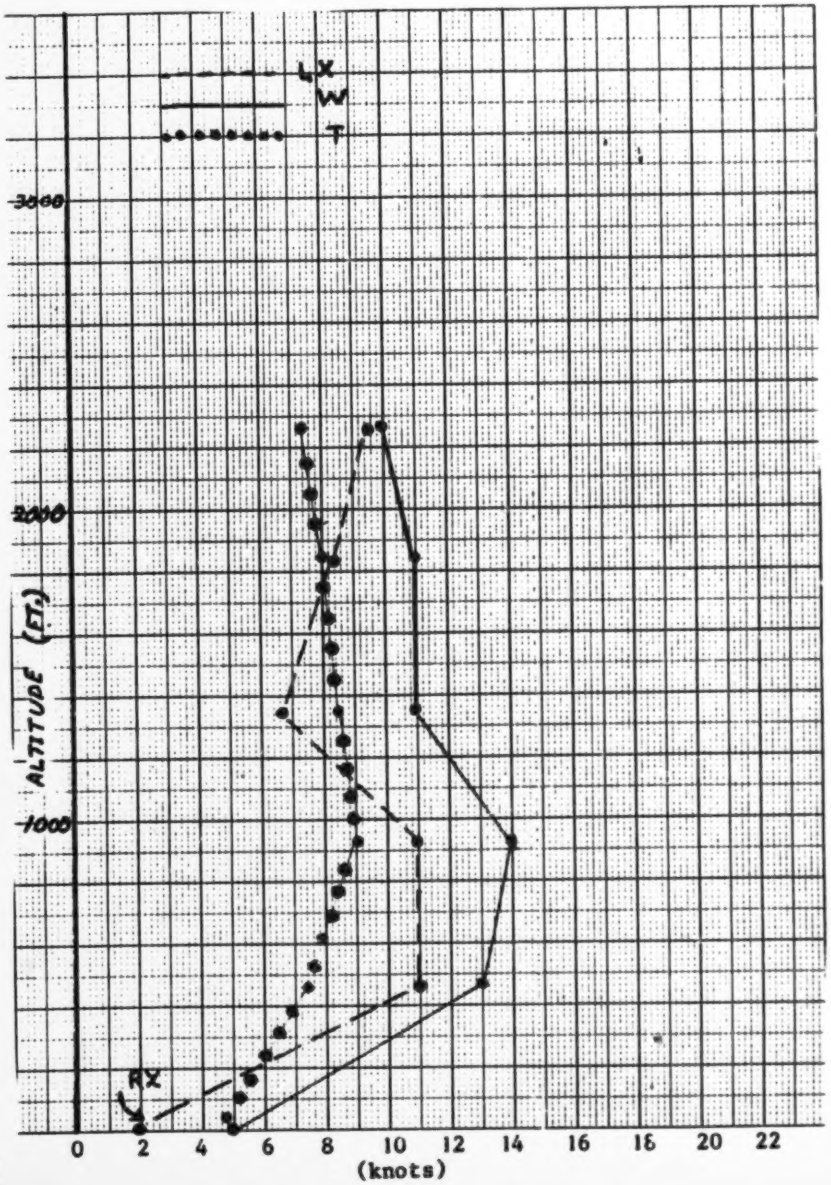

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FIGURE E5-5

DATE 6/24/80
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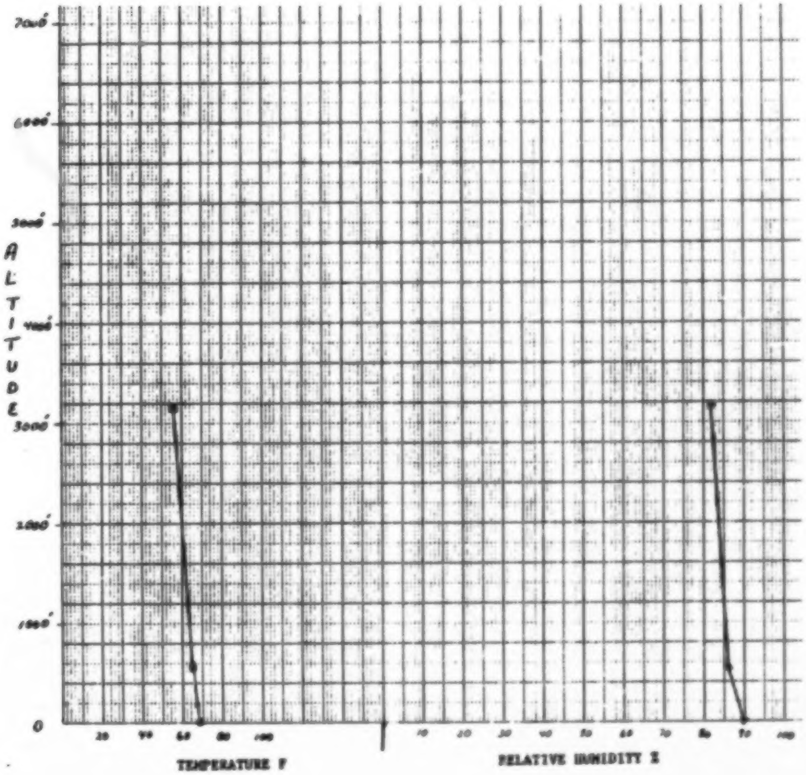

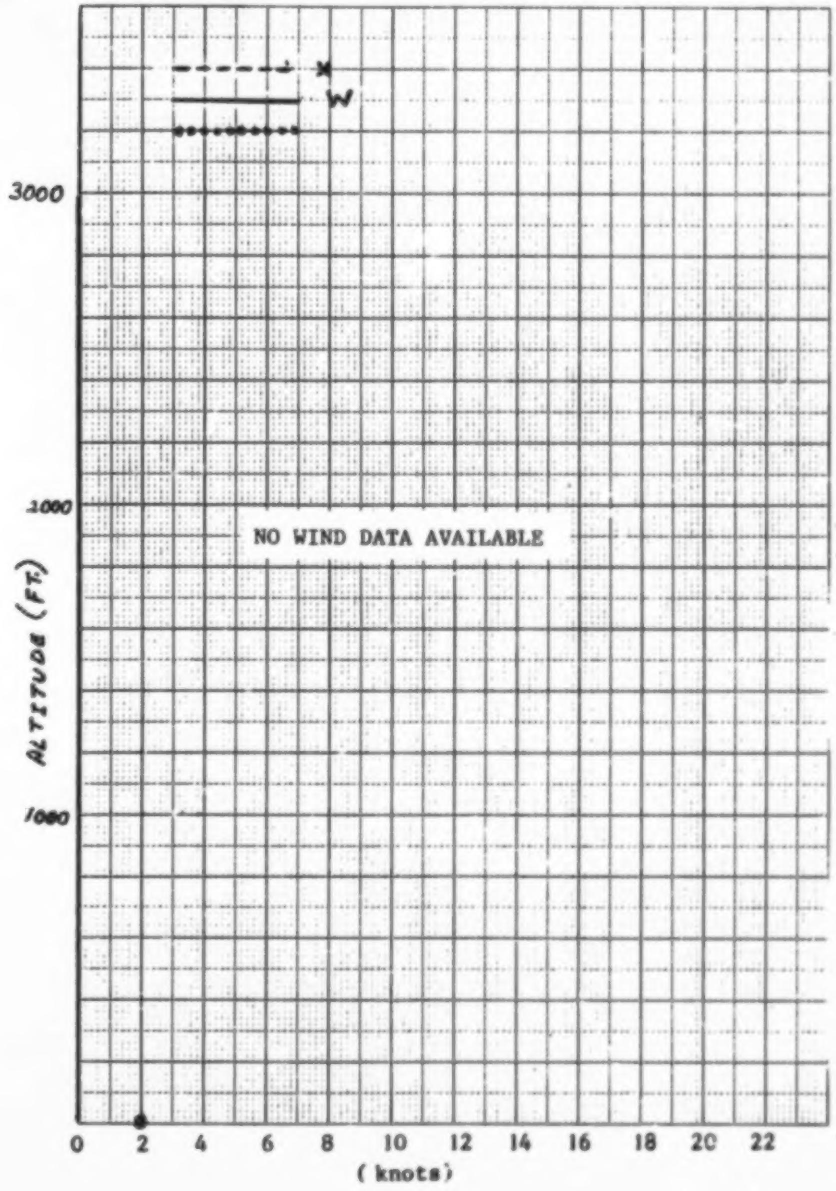

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FIGURE E5-6

DATE 6/26/80
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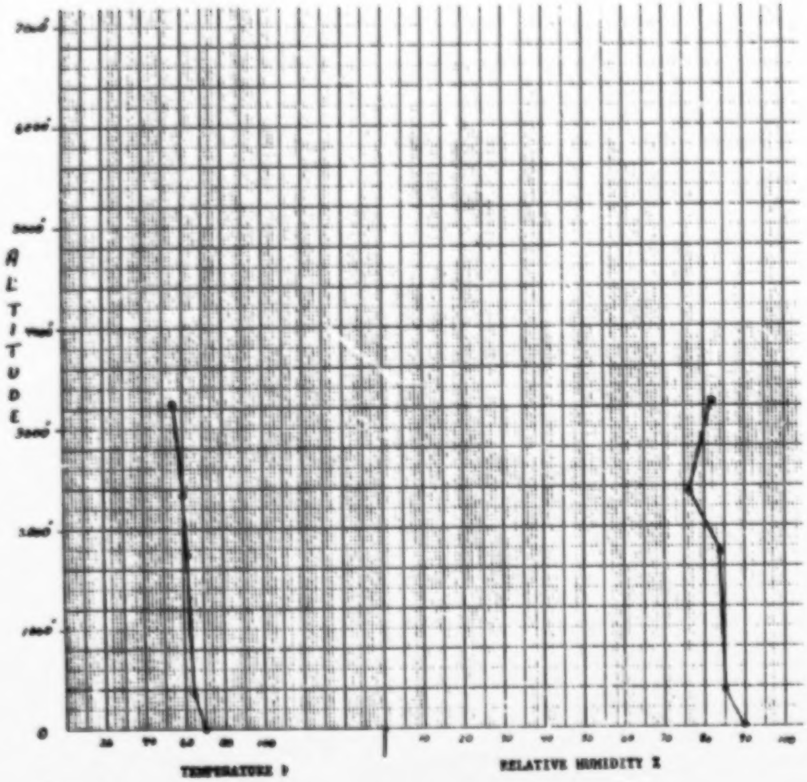

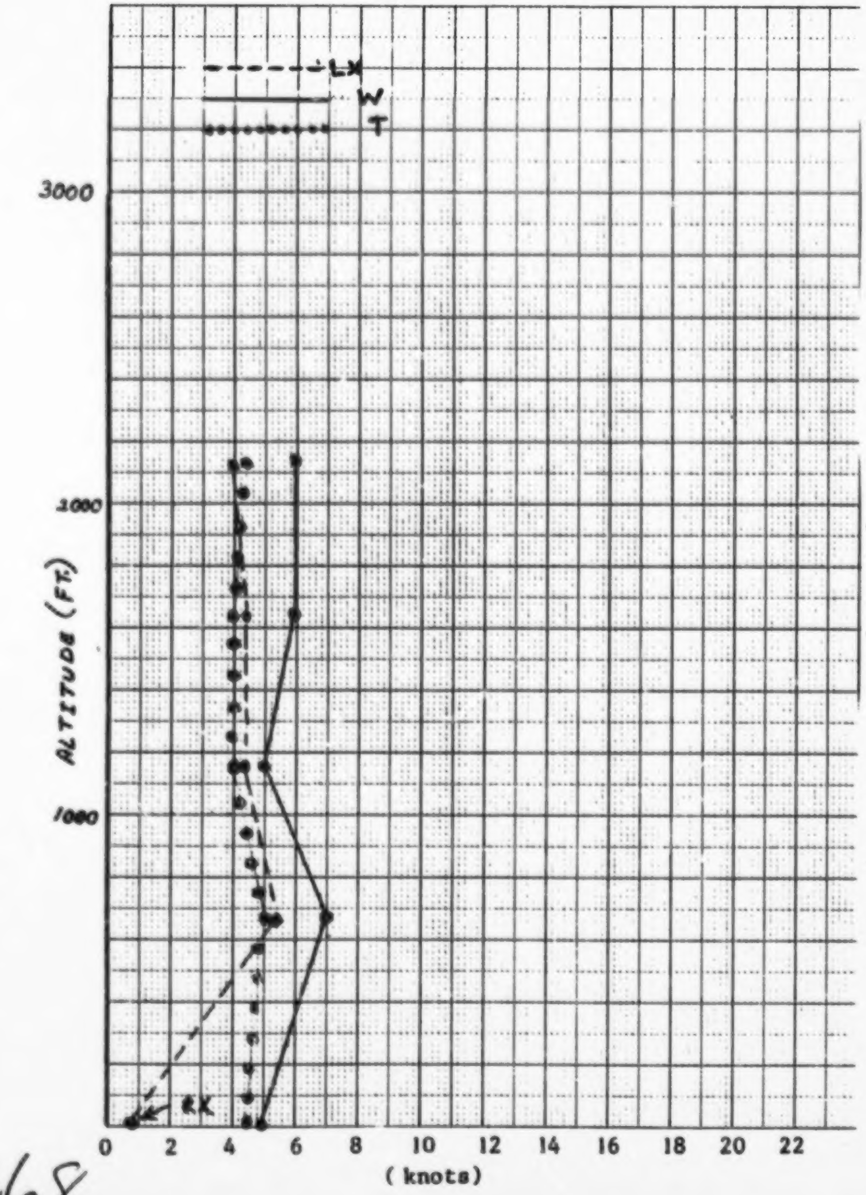

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FIGURE E5-7

BEST DOCUMENT AVAILABLE

DATE 6/26/80
ASC. NO. 35
LAUNCH TIME 9:00 AM